

THE ASCENT OF MAN AND SCIENCE

from THALES to NEWTON

by Hubert Luns (2012)

No full copyright, only attribution

1) The natural philosophy of Classical Greek culture	p. 02
2) The expulsion of Greek thinking from Europe	p. 13
3) Greek thought via the Persian bridge to the Muslim world	p. 17
4) Europe revisited	p. 35
5) The struggle with the influx of Greek thinking in the pre-Renaissance	p. 46
6) A breach between religion and science in the early modern age	p. 58
7) From the Reformation onwards to early modern science	p. 71
8) Wanderings of the Socinian-Alchemists	p. 83
9) The Alchemical connection	p. 99
10) Science as a Trojan Horse	p. 108
11) How Alchemy evolved into Science	p. 121

The New Atlantis, or the manipulation of science p. 135

The Breach between Religion and Science in the Early Modern Time p. 137

Arthur Waite Bibliography p. 155

The Ascent of Man and Science

in confrontation with the

Mysterium Coniunctionis

Introductory note: *The Mysterium Coniunctionis denotes the mysterious bond that exists between spirit and matter, like a mixture of oil and vinegar. A splendid example of this odd marriage exists in the human experience, which is of a special kind. The peculiarities of being, as we live it, is a never-ending source of wonder and science. Man himself happens to be the ultimate field of inquiry for the science of being, exemplified by the often-used expression: “as above, so below”.*

(1) This can be reversed into “as below, so above”. The latter means, as regards the Mysterium Coniunctionis, that the material world opens up to the spiritual; if, on the other hand, the spiritual is the starting point, the arrow flows in the opposite direction, which means that it is spirit that acts on matter. Since it is the same continuum, both arrows meet on the same plane. Both courses represent two complementary schools of thought (just like the right versus left hemispheric thinking) which, in the course of time have fought vicious battles, though victories can only be temporary. In our time the materialistic point of view seems to have gained the ascendancy in its investigation of the world in which we live. This is called ‘modern science’, which has performed a deep obeisance to the god of reason, ‘la déesse raison’ as the French use to call it. Science in its actual practice is the “abomination of desolation, spoken of by Daniel the prophet, standing in the holy place - whoever reads, let him understand”. (Mt. 24:15, Dan. 11:31) Is not this sanctuary, also the temple of our body? Indeed, modern science is a foolish self-exaltation of Man, which point is elucidated in our discussion about the Ascent of Man.

‘The natural philosophy of Classical Greek culture’ (1)

(6th century BC until 4th century AD)

1.1 - The essence of being

The science of our day perceives reality merely as a dead, mechanical and purposeless arrangement of matter and energy in the background of space and time. The physical world would follow a deterministic course like a fully wound spring that has been unwinding ever since. This lifeless empty vision ignores the SOURCE of life and energy it started with and closes the mind to a superior purpose given to it in the beginning ‘and’ set to it in the end, as far as “a beginning” and “an end” can be applied to the SOURCE of our existence, who is God, the Giver of Life. The consciousness of Man, who in the act of observing is self-consciously being aware, is not taken into consideration by modern science, except as an evolutionary by-product of this dead, unconscious reality. How the qualitative element of awareness somehow sprang out of a purely material world, containing mass, velocity, magnetism, gravitational force and so on, cannot be properly explained, as the definition of the latter precludes the possibility of the former.

For the casual observer, the pure materialistic vantage point seems to deny the spiritual element of being, but in actual fact it does take account of it, only in a different manner. It denies the spiritual as ‘the origin’ of physical being, but it does not deny spirituality as an exponent or follow-up of physical being. He cannot deny spirituality altogether; therefore, the materialist is

typically of the opinion that a full understanding of the essence of a thought process – yes, of the activity of thought itself – only requires a full understanding of the observable universe of the bodily brain.⁽²⁾ This implies that when the brain dies, the spirit (or whatever deserves the name) ceases to exist. This is wrong, for it is the soul that thinks ‘through’ and ‘by’ the brain in an inextricable interrelatedness. For the materialist any talk of an independent soul is gibberish. For him, when the material structure ceases to exist nothing remains, utter nothingness as regards the concept of thought. If - at the limit - there is talk of a psyche, it is conceived as a reflection of a kind of universal psyche that would exist within the material matrix of the universe; no place for individuality except in terms of a bodily existence. The only thing that would remain after death is a stinking mass of disintegrating tissue. In this way Man does not recognise himself as a real spiritual being but merely as a self-conscious material body. The human soul is thus relegated to a mere physical-intellectual quality of the self.

By contrast, the religious point of view considers that which cannot readily be observed – or which is indirectly observed – is that which constitutes the essence of being. Precisely the opposite point of view. Hebrews 11:3 formulates it as follows: “...*the things which are seen were not made of things which are visible*” (*ut ex invisibilibus visibilia fierent*). In other words: “*The visible world does not rest on itself; she is ‘suspended’ on a ‘beyond’ that can only be contemplated in faith and yet constitutes its true reality.*” (Otto Kuss) Consequently, once the things that appear to the eye cease to exist - such as, for instance, the brain - the spiritual entity connected to it, which could only be seen through its effect, is the nomad that remains. This is the most sensible approach as a little experiment will show, explained in the textblock.

The physical experiment showing that God exists

Imagine a cube that has been emptied of everything so that it contains an absolute vacuum where nothing is to be found, absolutely nothing (a vacuum is a modern concept that was not imagineable in Ancient Greece). Even then it would still be possible to send an electromagnetic wave through it, which crosses the distance within at the same speed as outside the cube. Not surprisingly the wave is indeed capable of travelling through it. But how is it possible to travel through nothing? This ‘nothing’, then, appears to have a distance, the distance of the space within the cube. Real ‘nothing’ cannot have a mathematical property like distance or something identified as virtual particles. We therefore have to conclude that inside the cube we have not made ‘nothing’, only emptiness, a space in which there is nothing to be found by way of direct observation. Emptiness is just what the word says: empty of something, but this is not nothingness. For instance, what happens if we drill a hole in the cube? Of course, the cube fills up. This means that the room inside possessed the potential to contain that which existed outside of it. This capacity to contain is what Aristotle calls *materia prima*, commonly defined as a property of space that precedes the elaboration of the concrete thing. In the same vein it is perfectly acceptable to postulate a world made of things that are not seen and to accept that the spiritual precedes the material.

An interesting thought is that because radio signals propagate in the void, signals can be added indefinitely: the void-paper is never full for it is a purely mathematical proposition. Moreover, since the decrease of the signal follows an exponential curve the signal never dies out. This means that until limitless eternity a radio signal propagates itself in space. That at a certain point it cannot be observed, does not detract from the principle. What we say on our iPhone remains forever! Funny thought... In view of the foregoing, the famous and failed Michelson-Morley experiment of 1887 – in order to detect the existence of aether – and the discussion that followed, were sheer stupidity.

In passing, the physical experiment described in the textblock could be the long sought-after ‘proof’ that God exists, be it on the conditions of the braggarts who challenge us with their boasting demand: “Go on! Prove that God exists!” Believers have tried to find a proof on their own terms and so their clever arguments have been less convincing. One can object to this experiment that an electromagnetic wave is capable of travelling through nothing because it carries with it the very conditions of measurable space: it creates space while travelling it. It is like the Muslim thought which states that distance is related to the object: no observable object no distance. Einstein’s note (a stupid one, by the way) at the beginning of the 15th edition of his “Relativity - the Special and the General Theory” states: “*Space-time is not necessarily something to which one can ascribe a separate existence, independently of the actual objects of physical reality. Physical objects are not ‘in space’, but these objects are ‘spatially extended’. In this way the concept - empty space - loses its meaning.*” But this cannot explain how two independent electromagnetic waves may act on the same object. If they are independently creating their own space, how can they be related? Evidently, they both exist in the same referential (which is a scientific term to denote our spatially extended universe - as a separate entity), but a referential is anything but nothingness. It is the non-observable ‘thing’ through which everything in the universe relates to each other. We are back again at the *materia prima*.

No difference between empty space and filled-up space in terms of ‘space’

In the third French edition of Immanuel’s Kant “Critique of Pure Reason”, that first appeared in 1787, the translator J. Tissot – who was the Dean of the literary faculty of Dijon and Professor of Philosophy – writes in its introduction: ⁽³⁾ «« The Cartesian theory of matter, according to which the extent, or dimensions, is said to be the essence of bodies, is incompatible with the mechanical, physical and chemical properties of bodies and ends in idealism. In fact, for the three dimensions of a solid body being none other than the three dimensions of space that it occupies, there is no difference, as to extent, between full space and empty space. From there, for Descartes, it is only the absolutely full that counts, or rather both aspects taken together of the identity of pure space and the bodily essence it contains. Moreover, since pure space could well be an absolute emptiness or, as l’abbé de Lignac ⁽⁴⁾ has already expressed it well: a certain possibility of fullness – i.e. of bodies, something that Descartes himself had already begun to perceive, it follows that the essence of bodies would only be their possibility, a simple idea coming to its fulfillment. In addition, the Cartesian theory of mind is no more sustainable than that of matter. If according to his famous saying that mind is nothing more than thought, if thought is its essence, the mind is only the same as its own possibility since thought is only conceivable, possible by the mind. And thus mind would be simultaneously its own cause and effect; which is pretty much like a vicious circle and a contradiction. »»

We could ask: Why should there be brains to support thinking whereas the soul is perfectly capable of doing so alone? As explained in the introductory note, the reciprocal relation between body and soul exists within the terms of the *Mysterium Coniunctionis*. As long as a man exists in an earthly vessel this reciprocal relation is wedded to his existence. Oil stirs up vinegar and vinegar stirs up oil. Because of the special bond of oil and vinegar, the magicians of old were men of wisdom, who tried to understand this bond while investigating the human subject. Plutarch (ca 46-120 AD), a philosopher and historian born from a wealthy Greek family, approaches the subject in his “On the Worship of Isis and Osiris” (ch. 56): “*The better and more divine nature consists of three parts: the spirit, the material, and that which is formed from these, which the Greeks call the world. Plato usually gives to the spiritual the name of idea or example, or father, and to the material the name of mother or nurse, or seat and place of generation. And he gives to that which results from both these entities the name of offspring or generation.*” If

we look at Plato's "Timæus", we find: "*We may liken the receiving principle (the material world) to a mother, and the source or spring (the spiritual) to a father, from which marriage a child is born.*" The supreme example of this 'child' is the human species. And to really understand this child, we must look at both the father and mother!

Only by taking the whole spectrum into account will a physician do a proper job – at least this was the conviction of earlier times. Therefore, the wise men of old were healers too. There is a special name for them: the iatro-philosophers or physician-philosophers. As long as the scientific method had not yet been put on a firm footing their focus of attention rested on the human side of the equation. Very slowly and progressively the inquiry extended to other fields and the investigation became more systematic.

The head is the highest and noblest part of Man

The following was the reply by Teresa Higginson (1844-1905) to a question of Father Powell's of the Alexander's Church in Bootle, Liverpool, given November 11, 1880. The Venerable Teresa Helena Higginson is the well-known apostle of the Devotion to the Sacred Head of Our Lord as the Seat of His Divine Wisdom:

«« In honour of the Sacred Head as Seat of divine Wisdom and Shrine of the powers of the holy Soul and intellectual faculties and centre of the senses of the body, I write dear rev. Father in obedience to your wish. (...) The question you asked me was - I think - why our dear Beloved Lord wished His sacred Head to be honoured as the 'Shrine of the powers of His holy Soul', when the soul was certainly all over the body and the head was not considered the acting seat of all the powers of the soul. And this is what I understand – that as the Reason or Intellect in us is that part of the soul that is nearest to God – is in a special manner the image of God, nay, is the very light of God in the soul, in which we see God as He is, and ourselves as we are, and are capable of judging right from wrong.

And as the head is the seat of the reasoning powers, and the faculties of the mind repose therein, so from the sacred Head shine forth in a blaze of resplendent light all knowledge, wisdom, understanding and a guiding power to direct and govern the Will and Affections of the sacred Heart; and in this is seen the connection of the desired Devotion – the ruling powers of the sacred Heart are seated in the sacred Head. I will not enter further into detail for I think what you wish to know is clear.

The soul pervades every part of the body, but as the reasoning powers are the highest faculties of the soul, and as the head is said to contain or be the Shrine of these faculties in a special way and the memory is said to exist in the brain, so the reason guides and directs the will and love or affections of the human heart. The head is the highest and noblest part of man but I do not mean that the soul is divided, no, these three powers though really distinct cannot be separated no more than the Persons of the adorable Trinity could be separated – they form together but one soul, which is immortal and perfect in its powers when filled with sanctifying Grace as is the Holy Soul of Jesus. And our dear Beloved Lord gave me to understand that though He was much offended by the sins committed through the weakness of the will and misled affections, yet the sins of the intellect far exceed those in number and in magnitude. »»



Teresa Higginson

Walter Russel has given interesting views on the relation between mind and matter in chapter 10 of his book “The Secret of Light”, written in 1947 and revised in 1971. Walter Russell, born in Boston in 1871, is called as a polymath. He is known particularly for his unified theory in physics and cosmogony. A person whose expertise spans a significant number of different areas is known as a polymath. In less formal terms, it may simply be someone who is very knowledgeable. Most ancient scientists were polymaths by today’s standards. In Russel’s view the universe is founded on the principle of a rhythmic and balanced interchange. His physical theories were not accepted by the scientific community and Russell explained that this was mainly due to differences in opinion about the essence of mind and matter. Here the quote:

«« The brain is part of a machine, a human machine. Machines can express thoughts which are electrically projected through them, but machines are incapable of thinking the thoughts thus projected (unless programmed to do so by its mentor. So, who does the thinking?).

Likewise machines can express knowledge but they cannot have knowledge (in the way of wisdom). Likewise machines can do marvelous things when patterned and controlled by knowledge, but they cannot KNOW what they do (no self-consciousness).

The centering conscious Mind of man’s Soul-will alone **thinks by projecting desire for creative expression through the brain machine.**

(...) The mistake in assuming that the brain thinks and knows is due to the fact that man believes himself to be thinking when he is only sensing. Man also believes that he is acquiring knowledge through sensed observation of sensed EFFECT, when he is but recording electrical sensations which inform him as to the nature of things observed by his senses.

(...) The centering consciousness of man, the PERSON, transforms information received by the senses into knowledge to the extent of which he is capable of recognizing CAUSE in spirit, back of the EFFECT which his senses record. Until that transformation takes place, man is without knowledge no matter to what extent his senses may have informed him, for information is not knowledge. »»

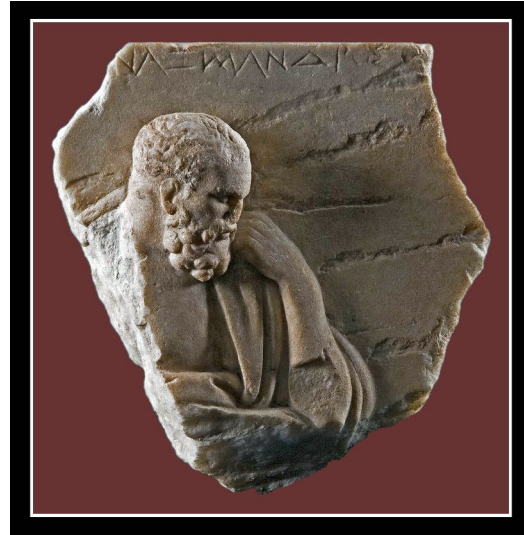
Materia prima and substantia are related ‘substances’

There is in the Divine Being but one indivisible ‘essence fousia’ [essentia]. God is one in his essential being or constitutional nature. Some of the early Church Fathers used the term ‘substantia’ as synonymous with ‘essentia’, but later writers avoided this use of it in view of the fact that in the Latin Church ‘substantia’ was used as a rendering of ‘hupostasis’ as well as of ‘ousia’, and was therefore ambiguous. At present the two terms, substance and essence, are often used interchangeably. There is no objection to this provided we bear in mind that they have slightly different connotations. The Presbyterian William Shedd (1820-1894) distinguishes them as follows: “*Essence is from esse, to be, and denotes energetic being. **Substance** is from substare, and **denotes the latent possibility of being.** The term essence describes God as a sum, as a total of infinite perfections. On the other hand, the term substance describes Him as the underlying ground of infinite activities. Essence is, comparatively, an active word; **substance, a passive.** The first is, comparatively, a spiritual, the last a material term. **We speak of material substance rather than of material essence.**” [Dogm. Theol. I - p. 271] (From this we may conclude that the underlying ‘invisible’ essence is an integral part of the material construct.)*

From: “Systematic Theology” by Louis Berkhof
Grand Rapids, Michigan # 1932, revised edition 1938 (VIII.B-3a)

1.2 – The gist of Classical Greek Culture

We can safely say that modern science was initiated by the natural philosophy of Classical Greek culture. On the one hand they had the so-called or holistic approach represented by Homer, Isocrates and Aristotle, who represent the literary-intuitive or holistic tradition. Holism is the idea that all systems and their properties should be viewed as wholes, not just as a collection of parts. Holism is a concept that represents all of the wholes in the universe, and these wholes are the real factors in the universe. This was the gist of the Classical Greek culture. On the other hand we have the trio of Pythagoras, Plato and Euclid who, as concerns their philosophy, were strangers in their midst. They espoused the ‘elementary’ approach where the parts are more important than the whole. The approach of Aristotle, who was a pupil of Plato, stands opposite the cool analytical approach of Plato. There was an ongoing struggle. It explains why Socrates was condemned to drinking a deadly beverage (with hemlock). The argument put forward by the Jury, so we are told, was that he corrupted the minds of the youth and that he introduced new deities. In their description of the trial, Plato and Xenophon, who were both pupils of Socrates, come up with some silly argument why Socrates was condemned, to which I give no credence. Of course, the accusation of introducing new deities is true, because this philosophy, expanded and put down in writing by Plato, was an attack on the very fabric of Greek society – as it has been on ours.



Anaximander

Neither Plato (ca 427- ca 347 BC) nor Aristotle (384-322 BC) can be seen as the first who practiced science, but Thales of Miletus (ca 624- ca 546 BC). He was the first to profess systematic thought without reference to mythology. Thales used geometry to solve problems such as calculating the height of pyramids and he was the first to predict a solar eclipse. His pupil Anaximander seems to have conducted the earliest recorded scientific experiments (as we are told by Greek writers). Anaximander’s pupil was famous Pythagoras. Anaximander claimed that an ‘unexpressed/indefinite’ (apeiron) principle gives rise to all natural phenomena. Some scholars think that apeiron means ‘that which cannot be experienced’ – by not relating it to ‘peras’ (limit), but to ‘perao’ (to apperceive), which is akin to the Hebrew ‘mah’. Therefore, A-peiron can be seen as the translation of the Hebrew ‘b’lee mah’ (b’lee means ‘without’), which appears in the Book of Job, written down perhaps just before Anaximander lived. As stated in Job 26:7: “*God hangs the Earth on the Intangible (b’lee mah).*” We may assume that Plato took up Anaximander’s apeiron and gave it a twist. He perceived it as the ‘idea’ from which the physical world would derive its existence by means of ‘imperfect’ imitations. Both would lead an independent existence. Aristotle, on the other hand, explained the apeiron by means of what he called the ‘materia prima’, which represents unrealized potential. At the other end stands its realized potential. The latter is the expression of the first, which can be observed in our material world. Both, the unrealized and realized, are welded together in ‘perfect’ harmony. Actually, the materia prima is the invisible first dimension that acts as the matrix which underlies all physical appearances. Philo of Alexandria, a contemporary of Christ, wrote in his “De Opificio Mundi” (4:16): “*When God proposed to create this visible world, He first made the intelligible world (the universe of ideas) as a model, in order that*

employing an immaterial and most godlike pattern He might produce the material world, a younger copy of the elder.” This is a way of explaining the *materia prima*.

Anaximander also introduced the principle of sufficient reason, that everything has a sufficient reason for otherwise it would not be. This was reintroduced by Gottfried Leibniz, who wrongly refers it to Archimedes. That principle plays an important part in theology: nothing occurs by chance; there is always a sufficient reason, up to the tiniest detail, for that is the way God acts by reason of his supreme rationality.

In the first half of the 5th century BC there is Leucippus, who formulates an atomic theory, put in writing by his pupil Democritus. He said: *“Apparently there is color, apparently sweetness, apparently bitterness. Actually there are only atoms and the void.”* Both Plato and Aristotle despised the atomic theory, because in their mind it contradicted the idea of having a continuous form in larger objects that consisted of an infinitive number of points. The atomic idea disappeared in the background except within the Islam that fused the atomic idea with the ideas of vacuum and the discontinuity of time, until finally it was taken up by the Catholic priest Pierre Gassendi (1592-1655). Gassendi was one of the important scientific figures of his time and clashed with his contemporary Descartes on the possibility of ‘certain knowledge’ in the way it was formulated. That issue is taken up in Chapter 6 that deals with the breach between religion and science.

It is quite evident that the Platonic concept was also inspired by the so-called sacred geometry, from which the appearance of things was thought to derive its *modus operandi*. To Plato the concept of ‘idea’ meant the original geometrical forms that formed the basis of all things in the world surrounding us, that which we perceive with the senses. Plato stated that the ideal world of geometric forms really exists in an eternal, unchanging and independent world (he meant the five convex regular polyhedra), while Aristotle maintained that both are inextricably bound up with each other – and he was right. Sacred geometry was thought to have in this higher world an existence in the larger framework of being. The world, as we perceive it, would derive its expression from that higher world in a continuous effort of imitation. And since (according to Plato) the sensible world is made of imperfect material, this striving leads to an approximate and less valuable world of appearances when compared to the perfect world of mathematical expression. ⁽⁵⁾

This schizophrenic approach, espoused by Plato, has played the tune for our modern science. In subsequent chapters the path leading towards it will be trodden, step by step. This pattern of thinking professes that we live in a makable world in which everything is bound to be improved, even the Product of God, his Creation. Our world would be an imperfect image of the true and hardly deserves our respect... Where today is there respect for Creation, whose dependent companion we are? Man should fit in, with his efforts being put into serving rather than subjecting, into arranging rather than controlling, and into managing rather than dominating.

1.3 – Constantine converted himself to the faith...

It will not surprise the reader that the Platonic vision does not fit with the Christian canon of faith. I would like to remind the reader that it was only after Emperor Constantine accommodated the Christian faith, early in the fourth century AD, that Christian affairs also started to become state affairs, though we may wonder who profited most: the religion or the state, for in practice Christianity as the state religion was often subjected to imperial decree; the pope, in a way, became subservient to the state, an ambiguity that has remained ever since. I would like to point out that it was in the nick of time, at the gates of death, that the Emperor converted to the ‘true

faith'. No wonder heathen elements entered the Church (think of the date of Christmas). The true Christian element was his mother, the saintly Helena.

Christianity was made by Emperor Constantine the religion of the state, but Paganism kept its foothold. Barthold Niebuhr (1776-1831), who became Germany's leading historian of Ancient Rome and a founding father of modern scholarly historiography, showed little praise for Constantine's belief in the new Christian God. Speaking of the murder of Licinius and his own son Crispus, Niebuhr remarks: ⁽⁶⁾

«« The religion which he had in his head must have been a strange compound indeed. The man who had on his coins the inscription Sol Invictus or the "Invincible Sun", who worshipped pagan divinities, consulted the haruspices, indulged in a number of pagan superstitions, and on the other hand, built churches, shut up pagan temples, and interfered with the council of Nicæa, must have been a repulsive phænomenon, and was certainly not a Christian (in the true sense of the word). (...) He was a superstitious man, and mixed up his Christian religion with all kinds of absurd superstitions and opinions (which, of course, should be seen under the dictates of time, der Sitz im Leben). »»

Under these circumstances it still took another two centuries before the breath of the Christian rulers was felt by all the stubborn in the realm, who were unfaithful to the new creed. Those include the Platonic 'idealists', who today would be called men of science. There has never been a heretic movement under that name, but they would certainly feel at ease with the Nestorians or the very similar movement of the Monophysites. These were the believers in a single nature of the Son of God (the Church professes two natures in one person: the divine and the human). In Asia Minor, which is the sphere of our attention, the main movements were Gnosticism, Manichæism (a kind of Gnosticism), Nestorianism, Arianism and Montanism of which only the latter two did not find their way to Persia.

Professor Hawking mocks God

"The Grand Design" by physicists Stephen Hawking's and Leonard Mlodinow, provoked much reaction, for the book states as if the universe arose "*from nothing*". Reverend Robert Barron, a theology professor at the University of St. Mary, complained that the book is philosophically terribly naive. "*For example*", says Barron, "*the structure of the physical laws that caused the appearance of the universe must have predated the Big Bang. The laws of gravity seem to be something other than nothing.*" "*The theories Hawking and Mlodinow use to base their arguments on*", wrote cosmologist Marcelo Gleiser on a blog, "*have as much empirical evidence as God.*" (Scientific American, Nov. 2010, p. 10)

In 313 Constantine the Great and Roman emperor Flavius Licinius jointly issued the Edict of Milan, which removed penalties for professing Christianity and pledged to return confiscated Church property. From then on the Christian religion and its practices were benevolently allowed. However, it neither made paganism illegal nor made Christianity the state religion; these were later actions of the Byzantine Emperor Theodosius I. It was not until 391 that Theodosius declared the Christian faith as the only legitimate imperial religion, ending state support for the other religions.

According to Eusebius' "Life of Constantine", Emperor Constantine adopted the well-known Greek phrase 'εν τούτῳ νικά' (of which 'in hoc signo...' is a translation) after the vision of a Cross of light in the sky with the words "in hoc vinces" (under this sign - the sign of God - thou

shalt conquer) that, according to legend, was seen by all his soldiers. This would have happened just before the battle of Milvian Bridge in the year 312. Eusebius tells that Constantine himself related the experience to him and confirmed it with an oath. Nonetheless, with someone like Constantine the details could easily have been adjusted to suit Eusebius' taste. Lactantius worked under his patronage as tutor. He tells a more credible story: *the battle took place, the Emperor marked the shields of his soldiers with the letter X drawn through it, and turned*



Chi-rho sign, symbol of Christ

This emblem is commonly consists of the first two letters (our ch) and the rho (our r, these stand for Christianity in Medieval periods, often complemented with the alpha and omega, an image of God who *am the beginning and the end*" (the alpha is the first letter of the Greek alphabet and the omega the last). This is certainly true for those periods, but in earlier times the X with a perpendicular line through it was used as a symbol of the Sun-god. It has been argued, says Lloyd B. Holsapple, that the sign on the shields of Constantine's soldiers was the acceptance, not of a religion, or of the symbol of a religion, but of a luck-token, which Constantine, who was prone to superstition, believed would bring about victory. By turning the perpendicular line into a P, the emperor also guaranteed the whole-hearted support of his Christian soldiers, who by then were far outnumbered by the heathen elements. Despite all of this, Constantine must have understood that Christ is not a warrior god. Why otherwise should he have himself baptized on his deathbed? He did not want to be baptized while still in office, just 'because' Christ is not a warrior god.

of Constantine's son Crispus. *"Directed by a dream, before the emperor marked the shields of his soldiers with a perpendicular line round at the top."* ⁽⁷⁾

known as the "chi-rho" and of Christ in Greek, the chi written as a P). Together the Late Roman and Early

In my view, those heathen beliefs in a 'warrior god' were not mere superstition, for the cause of war lies deeper than the human eye can see. Here we enter the field of meta-history. The cause lies hidden far in the history of the human race, for it is essentially the spirits of the dead, who are not at peace and who have not yet found their destination, who sweep up the emotions that call out for revenge. They are at the source of the recurring blood vengeance orgies with which our earth has been ridden. It is the ancestral help in these wars, being entreated by pagan formulas of baptism, which I believe Constantine did not want to miss. And so, at the gates of death, when those considerations had lost their value, he had himself baptised into the faith – much to the chagrin of his tribunes and generals; to the faith that for some years had won his imperial favour. ⁽⁸⁾

Notes

The concept of 'as above, so below'

(1) 'As above, so below' means that which is above matches that which is below. Stated differently, and the other way round: microcosm reflects the macrocosm. It expresses the ancient belief that man's being reflects the universe. It hinges on the concept of a 'dynamic interconnectedness', which sees the universe as a web of which no strand is autonomous: and thus mind and body, galaxy and atom, sensation and stimulus, are intimately bound together. The purpose of the mystery cults was to unite the microcosm with the macrocosm, and by this means to elevate the human consciousness to the all-embracing consciousness. I would like to point out that the magical practices, based on the concept of 'as above, so below', do not prove that the concept in itself is wrong. Of course, 'universe' or 'all-embracing consciousness' should not be equated to God, because 'then' it becomes a falsehood.

What is Special About the Human Brain?

(2) To illustrate my point that science 'believes' that the mind is based solely on the brains, I like to quote from amazon.com for a book called "What is Special about the Human Brain?" (Oxford Portraits in Science - 2008) that was written by Richard Passingham. The author is a professor of Cognitive Neuroscience in Oxford and has been an Honorary Principal at the Wellcome Centre for Neuro-imaging (London) since 1994. In a gross and completely inadequate simplification, the website description goes as follows:

«« It is plausible that evolution could have created the human skeleton, but it is hard to believe that it created the human mind. Yet, six or seven million years evolution came up with Homo Sapiens, a creature unlike anything the world had ever known. The mental gap between man and ape is immense, and yet evolution bridged that gap in so short a space of time. Since the brain is the organ of the mind, it is natural to assume that during the evolution of our hominid ancestors there were changes in the brain that can account for this gap. This book is a search for those changes. It is not enough to understand the universe, the world, or the animal kingdom: we need to understand ourselves. Humans are unlike any other animal in dominating the earth and adapting to any environment. This book searches for specializations in the human brain that make this possible. As well as considering the anatomical differences, it examines the contribution of different areas of the brain – reviewing studies in which functional brain imaging has been used to study the brain mechanisms that are involved in perception, manual skill, language, planning, reasoning, and social cognition. It considers a range of skills unique to us – for example our ability to learn a language and pass on cultural traditions in this way, and become aware of our own thoughts through inner speech. Written in a lively style by a distinguished scientist who has made his own major contribution to our understanding of the mind, the book is a far-reaching and exciting quest to understand those things that make humans unique. »»

(3) The original text by J. Tissot goes as follows:

«« La théorie cartésienne de la matière — suivant laquelle l'étendue, (or dimensions,) serait l'essence des corps — est incompatible avec les propriétés mécaniques, physiques, chimiques des corps, et aboutit à l'idéalisme. En effet, (pour) les trois dimensions d'un solide n'étant que les trois dimensions de l'espace qu'il occupe, il n'y a aucune différence, quant à l'étendue, entre l'espace plein et l'espace vide. De là, pour Descartes, (c'est uniquement) le plein absolu (qui compte), ou plutôt l'identité (des deux aspects ensemble) de l'espace pur et de l'essence corporelle (qu'elle contient). Or, comme l'espace pur pourrait bien être un vide absolu, ou, comme le disait fort bien déjà l'abbé de Lignac, une certaine possibilité du plein, c'est-à-dire des corps, — ce que Descartes lui-même avait entrevu, — il s'ensuit que l'essence des corps ne serait que leur possibilité même, une simple idée (arrivant à son aboutissement). D'ailleurs, la théorie cartésienne de l'esprit n'est pas plus soutenable que celle de la matière. Si l'esprit n'est que la pensée (selon sa fameuse expression), si la pensée en est l'essence, l'esprit n'est de même que sa propre possibilité, puisque la pensée n'est concevable, possible que par l'esprit. Ainsi, l'esprit serait tout à la

fois cause et effet de lui-même; ce qui ne ressemble pas mal à un cercle vicieux et à une contradiction. » »

(4) The name concealed behind “l’abbé de Lignac” is that of René-Antoine Ferchault de Réaumur, born on 28th February 1683 at La Rochelle. He died on 17th October 1757 at his Bermondière estate at Saint-Julien-du-Terroux. He was a scientist, interested in a variety of subjects such as metallurgy, temperature, porcelain and particularly entomology.

The Platonic ideal

(5) In his book “The Laws” Plato transposed this idea of the perfect world of forms to the world of political ideas. In his book “The Republic”, which should be read together with the other, he shows that a discrepancy exists between the ideal world of political ideas (like our human rights bill) and the practice of law and law enforcement. The conflict can be solved by means of the noble lie that the French call ‘raison d’État’ (motive of the State). This is deemed permissible because the ‘real’ world in the Platonic system is the world of ideals and the world in which we live is ersatz, which of course is an inversion of values. The discrepancy between the language of both books of Plato is so great that the reader has difficulty accepting that they were both written by the same author.

(6) “History of Rome” by Barthold Georg Niebuhr – London # 1855 (Vol. V, p. 359).

(7) In “Witness of God to his little souls” by J.N.S.R. from 12 March 2007, appears the interesting remark: “*When they (the Eastern Churches) will direct their eyes to My Cross, they will be taken by the same gladness that I gave to Emperor Constantine: ‘Under this Sign thou shalt conquer.’*” This proves conclusively that Constantine had a vision given to him by God. This could very well have happened during his sleep.

The cause lies hidden far behind

(8) At the gates of death Emperor Constantine had himself baptised into the faith – much to the chagrin of his tribunes and generals. A similar story exists of King Radboud in the year 705 AD. Missionaries were active in the Frisian kingdom, now the northern part of the Netherlands. Various important Frisians had converted to Christianity. King Radboud also had a favourable opinion of the new faith and wished to be baptised by the missionary Wulfram. The story goes that he already had one foot in the baptismal font when he asked if his ancestors would also be in heaven. Wulfram replied that such would not be the case since they had not been baptised. And at that Radboud is said to have stepped out of the font with the words: “*Rather in hell with my ancestors than in heaven alone*”. However, it is much more likely that he asked if the bonds with his ancestors, who had supported him in his wars, would be broken by baptism. He will have been more interested in the ‘here and now’ than in the ‘afterlife’, as is usual in princes. And when Wulfram answered that such was the case, Radboud decided against baptism. Incidentally, we need not despair of the possibility of salvation for our heathen ancestors who never saw the dawn of salvation. I refer to an interesting remark made by the apostle Paul. In passing he says (1 Cor. 15:29): “*...what will they do who are baptized for the dead, if the dead do not rise at all? Why then are they baptized for the dead?*” Baptism for the dead was practiced among the early Christians, as evidenced by a number of ancient texts. The Coptic Church still practices it today, as do the Mandæans of Iraq and Iran. It was prohibited by the Councils of Hippo and Carthage in the 5th century, and for this reason it is no longer practiced by the Christian churches in the West. No doubt, this practice will be reintroduced at the appropriate time already set in the mind of God.



The Ascent of Man and Science

in confrontation with the

Mysterium Coniunctionis

Introductory note: *In Part-1 we discussed the Platonic philosophy of the ancient Greek culture with its literary-intuitive tradition, which latter formed the crux of that culture. It is the former, usually called ‘Greek thinking’, that inserted itself into the mode of thinking so typical of our age. It went a long way, a very long way, to reach us. We are going to follow its path along its different stages. The first stage brings us to the Eastern part of the Roman Empire from which this particular mode of thinking was ultimately expelled, likewise as from the Greek culture.*

‘The expulsion of Greek thinking from Europe’ (2)

(fifth and sixth century)

2.1 – A new synchronization of world history

We turn our attention to An- (ca 482-565) became sole Empire after the death of his known as Justinian the Great. Roman Empire had been century. Certainly things did eruptions of the Krakatoa, which set in motion a chain change the political constel- Keys introduces his subject



no Dominum 527 when Justinian sovereign over the Byzantine uncle Justin. He is commonly By then the disintegration of the steadily proceeding for over a not improve after the volcanic newly born, in the year 535, and of events that was going to lation of the world forever. David as follows:

«« It was a catastrophe without precedent in recorded history: suddenly, with no warning or apparent cause, the sun failed to shine starting in Anno Domino 535. For months on end, a strange, dusky haze plunged much of the earth into semi-darkness. Crops failed in Asia and the Middle East as global weather patterns radically altered. Bubonic plague, exploding out of Africa, wiped out entire populations in Europe. Flood and drought brought ancient cultures to the brink of collapse. In a matter of decades, the old order died and a new world – essentially the modern world as we know it today – emerged. The Roman Empire, the invincible power in Europe, tottered and fell in a few decades in the sixth century. During the exact same period, the ancient Southern Chinese State, weakened by economic turmoil, succumbed to invaders from the North, and a single unified China was born.... These (and likewise events) were not isolated upheavals but linked together while arising from the same dire cause. »» ⁽⁹⁾

In retrospect its effect proved to be a new synchronization of world history. Procopius, referring to the darkened sun, later wrote that “*from the time this thing happened, men were not free from war, nor pestilence nor anything leading to death.*” (Wars IV, 14:5) Therefore, what went wrong during and after Justinian’s reign cannot be charged to his account solely, as historians have tried to do.

2.2 – *To bring back to the one fold*

Everything shows that Justinian was convinced of the divine calling for the tasks bestowed on him: to bring back the lost provinces to the one fold and of setting the fold itself in order, that is to say the divine order. He says in the opening words of his Constitution (Deo Auctore):

«« Governing under the authority of God our empire, which was delivered to us by His Heavenly Majesty, we prosecute wars with success, we adorn peace, we bear up the frame of the State, and we so lift up our mind in contemplation of the aid of the Omnipotent Deity, that we do not put our trust in our arms nor in our soldiers nor in our leaders in war nor in our own skill, but we rest all our hopes in the providence of the Supreme Trinity alone, from whence arose the elements of the whole universe, and through Whom their disposition throughout the orb of the world was derived. »»

The last phrase is in direct opposition to the Platonic ‘idealists’. Along with his wife Theodora, Justinian presided over the most brilliant period in the history of the late Roman empire. He recovered North Africa, Spain, and Italy, and carried out a major codification of Roman law.

2.3 – *The question of God’s nature*

What concerns us most is the emperor’s “*edict to the people of Constantinople concerning the faith*”, dated AD 554, shortly after the Council of Constantinople, in which he lays heavy penalties on anyone failing to confess and preach the orthodox Christian faith. In his commentary on this edict P. N. Ure writes:

«« The English reader will find nothing new in this edict even if he knows nothing of Byzantine history. It is an earlier version of our own seventeenth century acts of uniformity. The one unpardonable sin in a clergyman is not that he should disregard the teaching of the ten commandments or of the Sermon on the Mount, but that he should have what Justinian regarded as wrong views (unorthodox is the Greek word) on certain theological subtleties. In the sixth century A.D. the chief problems that exercised the would-be orthodox concerned the nature of the Second Person of the Trinity. The Word made Flesh was both human and divine, and theologians were exercised, as they had every right to be, with the problem of understanding and defining this double nature. The chief heretical sects of the period were pronounced to be heretical on the ground that they failed to do full justice to this double nature. »»

P. N. Ure is a respectable historian who thus formulated the general view. To most historians the full depth of the theological discussion is not understood, for otherwise they would not call it a triviality. They concede that the people of that time ‘choose’ to make it an important item. Yet I am convinced that it is still important, and not only in the intellectual framework of that time. If we look at it from the Platonic point of view, which considered the human body the ultimate field of inquiry, the question of how God’s nature in Jesus was linked to the flesh, suddenly becomes of interest. It appears no accident that this question arose in this part of the world, because Plato lived there and people in the age of Justinian were much interested in the Classical Greek culture for which they sought a revival. It was not only a theological discussion that concerned some isolated priests and monks and for a change the emperor and his wife, who for political expediency sided with different camps, but it was an existential matter of far-reaching consequences that concerned the academies, the high centres of Greek learning. Because of the controversy they had to disappear. As early as the year 489, date of the foundation of the Nestorian sect, Emperor Zeno Isauricus decided to close the famous academy of the very Christian town of Edessa, which academy showed Nestorian leanings (the teaching that there are two

separate persons, one human and one divine, in the incarnate Christ). Edessa was situated near the border of the Persian empire and it is of interest to us and no more than logical that here work was started on translating the Greek classics into Aramaic. Then, in 529, two years after he became ruler, Justinian delivered a painful blow to the innovators when he decreed to close all the academies in his realm, because he considered them, and in my view rightly so, sources of heretical thinking.

2.4 – Nestorianism

The Platonic position holds that everything proceeds from imitation of the higher spheres.⁽¹⁰⁾ This had to result in one nature; two natures in one person would be inappropriate for this philosophical system. Christ on earth would mean for the Platonic ‘idealist’ that in Christ the imitation had - by way of exception - become perfect. To the ‘idealists’ the question focused on what kind of bond had facilitated this fit. Along the same line of thinking, Nestorius (†451), who became patriarch of Constantinople, stressed the distinction at the level of Christ’s human and divine natures, while allowing for some ‘conjunction’ at the level of Christ’s person. He repudiated the view, embraced by some of his followers, of a separation between the human and divine nature that were linked by a merely accidental unity of mutual love.

Eutyches († ca 454), a leading monk of Constantinople, taught that the unity in Christ was such that only one nature (physis) remained in Christ after the incarnation, the human nature (by imitation) being swallowed up by the divinity. Eutyches was a Monophysite, a numerous group who were influential in many parts of the Eastern Roman empire. In short, they were a power to be reckoned with. Here is what the illustrious chronicler of Justinian, Procopius of Cæsarea, has to say on the subject, which shows that the quintessence of the discussion went beyond the grasp of the common educated man:⁽¹¹⁾ *“I hold it a sort of mad folly to research into the nature of God. Even human nature cannot, I think, be precisely understood by Man; still less so can the things which appertain to the nature of God.”* (Wars V, 3:8) It was only after the Council of Constantinople in 553 that their position hardened into a schismatic movement, which would be persecuted not by appeasing compromise but rigorous suppression, as was the fashion then.

2.5 – Gundishapur, the new centre of heretical thought

The heretics did not bend and were too intelligent to head for their own destruction. The solution was simple. Four years after Justinian became the sole sovereign, Khosrau I, also known as Anushiravan (the blessed), ascended to the Sassanid throne of Persia, thus in the year 531. For the greater glory of his empire and to annoy his foe he welcomed the various men of learning. The monarch commissioned the refugees to Gundishapur to continue to translate their literature into both Aramaic and Pahlevi, the latter being an Iranian language. Anushiravan also turned towards the East and sent the famous physician Borzouyeh to India, to invite Indian and Chinese scholars to Gundishapur (fortress of Shapur), situated some 400 km east of Baghdad where the Tigris delta and the great Iranian mountains meet, on today’s maps known as Shahabad. Many other emissaries brought Greek scholars from Alexandria and sages from all over the territories of Asia Minor. Gundishapur was going to harbour the oldest known teaching hospital in history. It seems safe to assume that there was much debate as to the proper medical method to be followed with so many traditions. If these questions were settled empirically, by hospital observation, trial calculation, etc. – of which we cannot be sure – then Gundishapur would have benefited from an early version of the scientific method. At some later epoch a number of refugees felt unhappy and decided to return back to their homeland.

For them, bending to the whims and wishes of Justinian appeared the better alternative, but a sufficient number must have stayed to lend credibility to the academy. It was Anushiravan's wish to have in Persia a Greek academy of the same stature as the great Academy in Alexandria, and at the start the same curriculum was adopted. The books and manuscripts, including the medical and philosophical works of Galen, were studied and lectured upon as in Alexandria.⁽¹²⁾ To make settlement in Persia attractive he had the idea of founding a new Antioch town at or near the place of present-day Baghdad with the large group of prisoners captured during his sacking in 540 of that Roman town with the same name. At New Antioch he built them a bath and a hippodrome and the construction plan followed the Roman methods. He brought charioteers and Byzantine musicians and fed them permanently at his own cost. He condescended to call them the "King's People" subject to no authority except himself. Anushiravan's reign was long enough to leave a lasting impression. He stayed on the throne until his death in 579.

Notes

(9) These changes are discussed by David Keys in his book "Catastrophe: an investigation into the origins of the modern world", Ballantine Books, year 2000. (quote from the book cover)

(10) The key expression in this Platonic proposition is 'to proceed from'. Mathematical imitation becomes theologically acceptable if the statement changes to: "Many things operate amongst other things by the imitation of mathematical propositions, functioning as laws of nature."

Was Procopius writing the truth about his inclinations?

(11) A different interpretation is possible. Procopius' "Wars" is laced with allusions to Plato's "Republic" and it may well have been that he sided with the heretical movement, himself being not too Christian minded, although he pays lip service to the official religion. I now quote from Anthony Kaldellis' "Procopius of Caesarea" (2004) p. 116: "*John Lydus, the bureaucrat and antiquarian, seems to have been a close friend of Procopius. He too (just like Procopius) hated Justinian and had close connections to the Platonists and other pagans of the sixth century.*" Being the official chronicler of Justinian, Procopius could not openly criticise Justinian. If he sided with the Platonists he had to do it covertly by making the whole conflict trivial, which in that case has put a legion of historians on the wrong footing.

References

(12) The early practice of medicine and the exchange of ideas between Eastern schools of philosophy and the West, in particular with the school of Alexandria, are highlighted in publications like: "Le bonheur-liberté – Bouddhisme profond et modernité" by Serge-Christophe Kolm, Presses Universitaires de France (PUF) – 1982/1994; "Syrian anatomy, Pathology and Therapeutics – The Book of Medicines (The Syrian Text)" by E. A. Wallis (edited from a rare manuscript with an English translation), Humprey Milford / Oxford University Press – 1913; "Von Alexandrien nach Bagdad" by M. Meyerhoff, Sitzungsberichte der Preussischen Akademie der Wissenschaften, volume 23 – 1930, pp. 389-429; Nicoletta Palmieri contributes a lengthy and lively article (pp. 33-133) on the theory of medicine from the Alexandrians (5th-7th century AD) to the Arabs in the Bulletin of the History of Medicine, volume 73, No. 2 - 1999; "Les Voies de la science grecque – Études sur la transmission des textes de l'Antiquité au XIX^e siècle" by Brigitte Mondrain, edited by Danielle Jacquart, Droz Publ. Paris - 1997, pp. 33-134; "Les commentaires de Stéphanos d'Athènes au Prognostikon et aux Aphorismes d'Hippocrate: de Galien à la pratique scolaire alexandrien" by W. Wolska-Conus, Revue des études byzantines, volume 50 – 1992, pp. 8-9.

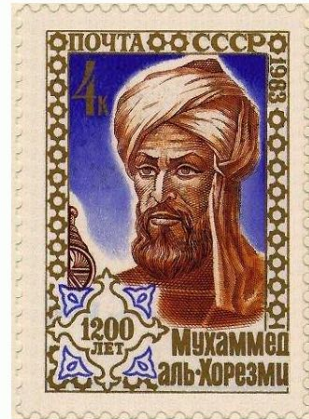
The Ascent of Man and Science in confrontation with the Mysterium Coniunctionis

Introductory note: Having traced the ancient Greek thought on its way to Byzantium, we witnessed its expulsion beyond the fringes of the Roman Empire, in the far-away heartland of Persia. Now we are going to see how things turned out in the quietness of that region.

‘Greek thought via the Persian bridge to the Muslim world’ (3) (6th until 10th century)

3.1 – The Islamic fury sweeps over the world

Outwardly all was calm again, but in the year 579 – when Persian king Anushiravan died – things had already started to brew in the vastness of nearby deserts. In this destitute environment, within a small urban settlement, lived a poor orphan of nearly ten years old, who answered to the name of Mohammed...⁽¹³⁾ He was to become a tradesman and later a warrior chief. His belligerent teachings and simple creed with elements of the Jewish, Christian and Zoroastrian faiths, though antagonistic to those faiths, were going to change the world. In 632 Mohammed died, leaving one surviving child, his daughter Fatima. By then, according to some accounts he had come to dominate no less than one-third of the Arabian peninsula. The banner was taken over by his father-in-law Abu Bakr, who took the title caliph, or ‘successor’. He died two years later while in the meantime he had been occupied with the secession or Ridda wars, which he fought most ruthlessly. Simultaneously and at the beginning of his reign he had started the conquest of Syria. He warred to consolidate and to bring the new faith to large sections of nomadic Bedouins who had stuck to their ancient tradition of idol worship. The conversions were a momentous occasion for the new religion, now called Islam, which means surrender or submission. Mohammed had forbidden his followers to fight against members of ‘the faith’, being gathered in the umma, but allowed them to attack other tribes so long as their targets were non-Muslims. By replacing tribal loyalty with religious loyalty, Mohammed transformed the razzia into Holy War (Jihad). The above idea of the origin of the jihad was formulated by William Montgomery Watt in his “Muhammad: Prophet and Statesman”.⁽¹⁴⁾ Patrick Sookhdeo, the Director of the Institute for the Study of Islam and Christianity, writes in his book “Islamic Terrorism”, while referring to Toshihiko Izutsu, R. Dozy and Reuven Firestone:⁽¹⁵⁾



«« In considering the implications of the shift from allegiance based on kinship to allegiance based on a shared religion, it is important to understand just how powerful a force tribal loyalty was. Writers have struggled to convey its overriding importance in pre-Islamic Arabia: “Tribal spirit was no doubt the fountainhead of all cardinal moral ideas

*on which Arab society was built. To respect the bond of kinship by blood more than anything else in the world, and to act for the glory of the tribe – this was by common consent a sacred duty imposed on every man i.e. every individual member of the group. This limitless and unshakeable attachment (...) that a pagan Arab feels for his fellow-tribesmen, this absolute devotion to the interests, prosperity, glory and honour of the community into which he was born and in which he will die – this is not in any way a sentiment like our patriotism, which would appear to a fiery Bedouin too lukewarm. It is a violent and terrible passion. It is at the same time the first and most sacred duty of all duties; it is the real religion of the desert. (...) It was this allegiance and loyalty which Mohammed redirected from blood relatives to co-religionists, from the tribe or clan to the umma (ecclesia). He can also be said to have moderated the more barbarous elements of the (customary) razzia by introducing the concept of dhimma – a protected but very humiliating status available to Jews, Christians and Sabeans (not to pagans) on payment of a tax called jizya.” At the same time, however, Mohammed introduced a new and terrible element **in the cause of Allah**, where brother would be allowed to kill his brother or sister, and a son would be allowed to kill his father. Before the introduction of Islam, since the dawn of time, the killing of kin and tribal brothers had been strictly forbidden but was now being replaced by a new and frightening loyalty. »»*

This limitless and unshakeable attachment that a pagan Arab feels for his fellow-tribesmen is still to be observed with the very few Bedouins in the real sense, wandering and nomadic in the Saudi Arabian Kingdom. Qanta Ahmed, a female doctor of the King Fahad Hospital in Riyadh, gives a touching description of their style of living:

«« ...When these elders became ill, their sons or grandsons would bring them in for treatment, often the whole family keeping vigil. Occasionally families would pitch tents outside the (hospital) compound as they waited for the health of their loved one to be restored. And while doing so they cast a cozy umbra of reverence and affection for all those who cared for their kin. I quickly discovered the Bedouin families were invariably grateful and compliant. No family, indeed no Saudi patient, male or female, ever objected to me, a woman, examining them. They did not express even this fundamental discrimination that elsewhere seemed intrinsic to Kingdom life. Bedouin families welcomed women doctors. When I cared for their sons or fathers or husbands or brothers or grandfathers, the very patriarchs of these noble ancient families, even the most orthodox families never objected. In two years not a single Bedouin family ever asked for a male doctor to replace me. Not a single Bedouin objected to my unveiled status. To the contrary (...) they accepted me. I was constantly surprised and always gratified when the many families whose relative I did attend expressed open admiration that I was a woman, sentiments they transmitted with intense smiles, with deep, kohl-ringed gazes of emotion, or simply with a clumsy brush of fragrant attar (Arabic essential oil) smeared on the back of my snatched hand, clasped between the roughened, sun-blasted fingers of their senior sons. I blushed deeply when this happened the first time, amazed that a Saudi Bedouin man dared to reach for my unmarried hand and do so publicly. Their warmth was unmistakable and immediately transported me to the Arabia that had so bewitched Lawrence (of Arabia). »» ⁽¹⁶⁾

This short account proves that the Muslims of today are not necessarily the same as the Bedouins of yesteryear. During the conversion of the ancient Bedouins their fierce warrior tradition was exploited, so that they believed that conversion meant first and foremost at the point of a sword. As the urbanised Arabs had come into contact with the great cultures of their time by means of their trading activity, they were more lenient and they perceived ‘surrender to the faith’ as a

personal commitment as well. The others, however, gave it a warlike connotation and saw it as their duty to force those who were living in the 'dar al-harb' (land of conflict and strife) to surrender to the new religion, so that henceforth they could live in the 'dar al-islam' (land of submission). Dar al-harb (land of war) is the name given by Muslims to the regions where Islam does not dominate, where in their eyes divine will is not observed and chaos the logical consequence. By contrast, dar al-islam is the name given to those regions where the Sharia (Islamic legal system, a penal code) dominates, where submission to God is observed and hence peace and tranquillity reign, which actually is an elusive state, only to be reached once the whole world has been submitted.

Islam means submission

The word Islam is derived from 'taslim', which means "total submission". It applies to human relations in its threefold horrific nature: 1) complete control versus total obedience; 2) the right to take full advantage of the human object versus allowing to be exploited; 3) supreme dominance versus being kept in a state of abject humiliation. There is a hierarchy of submission: as a man is subject to God, the woman is subject to a man, and the unbeliever to any Islamic woman. Study of the books of Islam, study of the bloody trail of their 1400 years of history, shows that the current extremist tendencies are less of an aberration than our leaders would have us believe. We see that Islam can indeed be regarded as a system in terms of 'taslim'. Taslim has been described as being before God's Power like a lifeless tool, a dead body in the hands of a mortician. Taslim is also a name suitable for a girl; as a boy's name it is less appropriate. Whether the practice of total submission, according to its threefold horrific nature, is mainstream or sectarian is not important under the conditions in which we now live. Important is that the continuing destructive and horrific deeds of substantial segments of the Islamic communities are not contrary to conventional Islam, which explains why honour killings and the like and Islamic terrorism have always met with general if silent approval from their co-religionists, who are proud of their identity and what brings it forth. Any criticism, any condemnation, yes any, is seen as an attack on their Islamic and cultural identity.

As Bill Warner of politicalislam.com says (Nov. 21, 2008): *"The Qu'ran is filled with insults and curses by Allah. Insults and curses are part of Islamic logic. Kafir (non-Muslim) logic advances an argument by analogy, syllogisms, cause and effect – scientific logic. Islamic logic is based upon making you submit to Islam. Therefore repeated force, threats and insults are all part of the logic of simply overpowering the other."*

Unbelievers, the 'kafir', are those against whom Islam waged war. Whether the followers of Mohammed live as normal citizens or as soldiers, they have a moral obligation to fight or to support the fight – if it so happens that these kafir do not respond to their plea to convert. The kafir must be submitted and their wealth made legitimate booty. In the eyes of the conquerors, brute force had then become the chosen means of persuasion. They reacted in the manner of little children whose way of communication is spanking. Of course, Islam focuses more upon proper conduct than on proper beliefs and faith. Generally, a Muslim looks perplexed if asked: "Why do you believe?" His best answer: "Because Allah 'commands' me to do so." It is this strange combination of the proclamation of primitive beliefs of the urban dwellers and that of the wandering nomads that still makes up the crux of their missionary programme. The onrushing Moors furthermore believed that dying in battle while promoting Islam guaranteed them a glorious entrance into heaven (where sensual virgins would attend to their needs).

In the ensuing power struggle after Abu Bakr's death, Fatima's husband Ali ibn Abi-Talib tried to take over the leadership. Umar ibn Abdal-Khattab, who claimed to be the prophet's adopted

son, prevailed. By the end of the rule of the second ‘rightly guided’ caliph, that lasted a mere ten years (634-44), the whole of Arabia, part of the Sassanid empire, and the Syrian and Egyptian provinces of Byzantium had been conquered. It would not be long before the Mohammedans would rush into the outer regions of Persia. The explosive growth of the Caliphate coincided with the chaos of the Sassanid rule and weakness of the Byzantines; these conquests came easily and were completed by the year 650. Six years later the third caliph was assassinated. Ali installed himself as the fourth, but that was disputed by a member of the Umar-clan. The schism between the parties of Umar and Ali became complete at the battle of Siffin in 657. Ali himself was to be assassinated some four years later. The furious Umayyads (Umar-jads) swept out of the deserts mounted on Arabian horses that had been bred into formidable weapons of war. The Umayyad Dynasty was going to stretch from Spain to the Indus and from the Aral Sea to the southern tip of Arabia. Ali’s faction remained, and it still exists as the Shi’it movement (Shi’at means faction) as distinct from Sunnism, the latter comprising almost 90% of all Muslims today. The conflict continued up to this day. The Shias initiated many bloody and cruel rebellions that through the centuries have ravaged large regions of the Islamic world.

3.2 – Islamic civilization based on older sources: first Gundishapur, then Baghdad

The Umayyads borrowed heavily from the Persian and Byzantine administrative systems. In Persia, Arabic was to become the language of the elite and Islam was going to replace Zoroastrianism, a religion founded long ago in the age of the biblical Gideon by a certain Zarathustra. Tradition says that he issued his teachings from a cave nearby Gundishapur (Fortress of Shapur). Here too, in this very city, Mani, of Jewish-Christian descent, was martyred and skinned alive because of his unorthodox teachings. The first leader of the academy at Gundishapur had been someone who called himself Joshua Ben Jesu. That sounds very Christian and possibly he was himself a Nestorian Christian. Whether his teachings were very Christian cannot be sure. The Ben Jesu family kept the reigns of the academy until massacred by the Umayyads and no doubt this explains why very little is known about their philosophical teachings. As the later developments seem to indicate, the older Greek philosophy was left untouched by the Umayyad warriors, as were the Indian mathematics, and all the knowledge on medical practice was brought together. From then on the translation of these works from Aramaic and Pahlavi into Arabic started, be it imperfect and on a small scale. The works must have been saved coincidentally because of their usefulness to the conquerors of the hospital, where they were kept. Because of their historic relation with the knowledge of the human body, the works of the Greek philosophers and the Indian mathematicians must have been kept at the Gundishapur hospital, which could explain why they escaped destruction. In later ages the Muslim philosophers were indeed also practitioners of medicine – like Abul ibn Roshd, whom the Latin scholastics called Averroes (1126-98), the most famous of the mediæval Islamic philosophers, who became the personal physician of the caliph at the court of Marrakech (Morocco). It is significant in this respect that here in the West his “Commentaries on Aristotle” is his most famous work, a work that in Moorish Spain fell into disgrace, even in his lifetime.

At the fall of Alexandria in approximately 642, the Royal Library of Alexandria was set on fire during the Muslim conquest.⁽¹⁷⁾ General Amr Ibn al-Ass (573-663) was instructed by Caliph Umar to destroy all the books in Alexandria, known as the “um al-maktabat” or mother of all libraries. He also destroyed several fabulous monuments in town. The destruction was done according to the hallowed formula: “These books either repeat what is contained in the Koran or they do not; if they do, they are useless; and if not, they ought to be destroyed.” Medical practice, however, and its instruction continued in Alexandria until it was closed by the caliph in about the year 718. The medical activity then seems to have moved to the Nestorian monastery Qennesrè on the Euphrates, which had become well known as a centre of medical study and for its

translations. The destruction of the Library has become a symbol here in the West for loss of cultural knowledge due to barbarism and neglect. The Library was created by Ptolemy, who was one of the successors of Alexander the Great. It is unknown how many such scrolls were housed at any given time, but estimates range from 40,000 to 400,000 at its height. Fact is that the library suffered several fires over many years. Possible occasions for the partial destruction of the Library include a fire set by the army of Julius Caesar in 48 BC and an attack by Aurelian in the 270s AD. Another important factor in the loss of the Library was its neglect by the different leaders responsible for it. They tended to care less and less about the upkeep of the Library or the pursuit of important knowledge. By the time the Library was destroyed by the Muslims, many works had already moved to other libraries in the ancient world where they were better cared for, details of which are unsufficiently known.

After a reign of almost one hundred years the Abbasids supplanted the Umayyads, in the year 750. The Islamic world then split up into a number of states, and political unity gave way to a cultural unity, which in their eyes means a unity also in language. Muslim thinking starts from the principle of the “One God”, which implies a unity in language. Therefore the Arabic language, the language in which the revelation to the prophet Mohammed is said to have occurred, has to spread – in the minds of the people – with the spread of Islam. That even highly educated Arabs are not able to read the Koran in its original tongue without dictionaries and etymological commentaries is to them no problem. Even if not generally spoken, such as in Persia and Spain, it still became the main language of religion and public office. Even the Jews in Spain finally came to use Arabic amongst themselves for philosophy, science and poetry. This was, however, a slow process. In the beginning and until the 10th century we cannot speak of an Arabic-Muslim culture in the territories under Islamic control. At first the people in the conquered territories kept their old identities and languages; Aramaic was still the language of choice in the former Byzantine and Persian regions; in Syria the language was Greek. In effect, the early Christian literature available in Arabic, like the apologetic literature, was born from an encounter with the conquerors, when the Christians were still more numerous and enjoyed a more elevated social status than in times since. Throughout the Middle East there were many monasteries – Nestorian, Monophysite, Sabeian and others – where the books of Plato, Aristotle and Galen were kept and studied. In Egypt alone there were still 120 monasteries in the 12th century, though their number had vastly decreased since the Arab conquests. There were many Christian centres of learning in the conquered territories. Without question the most important was the Nestorian Bishopric in the ancient Sassanid capital Ctesiphon or Taysafun (32 kilometres southeast of modern Baghdad), whose population did not suffer much from the Muslim conquest, though its famous library was completely destroyed by them in the year 637.

As correct political thinking of our day dictates, the ancient Arabs seem to have greatly contributed to an increase of the world’s knowledge. But it is an appearance only, for they had little scientific originality or creativeness of their own. The reasons why will be discussed later. Reverend R. F. Grau, Professor of Theology at Königsberg, pointed out that the ‘pure’ Arabs developed *“no new industry or technique or trade. The only thing they did invent was a new style of architecture.”* ⁽¹⁸⁾ Sir Edward Creasy observed at the turn of the 20th century, to which I only partly agree: ⁽¹⁹⁾

«« Much of Hindoo science and philosophy, much of the literature of the later Persian kingdom of the Arsacidæ, either originated from, or was largely modified by Grecian influences (after the spread of their culture to the east). So also, the learning and science of the Arabians were in a far less degree the result of original invention and genius, than the reproduction, in an altered form, of the Greek philosophy, and the Greek lore acquired by the Sarasenic conquerors, together with their acquisition of the provinces, which

Alexander had subjugated nearly a thousand years before the armed disciples of Mohammed commenced their career in the East. »»»

Jirjis Bukhtyishu, a blasphemous name

Why did the head physician of the hospital have the name Jirjis Bukhtyishu or Jesus Saviour? It seems safe to assume that he wanted to express that in him the imitation of the divine had become perfect. This interpretation shows the ultimate consequence of the Monophysite idea, which makes Jesus a reflection of God rather than God Himself. The correct view is that in Jesus Christ God introduces Himself into human creation with a view to opening up the possibility for a human to reflect that new reality. Christians worthy of that name try to become an imitation of Christ in their identification with the divine and fatherly Will. If such a Christian called himself Jesus Saviour that would be blasphemous because an imitation however perfect is different from the real thing.

3.3 – The nature of the Bayt al-Hikmah

The Umayyads were ousted by Caliph Abbu-L-Abbas al-Saffah (749-54). In the Islamic context, Al-Saffah was an enlightened ruler. He constructed the first paper mill in the Muslim world, something that was to prove important for the development of the sciences. The second Abbasid caliph, Al-Mansur (754-75), founded Baghdad, which was to become the capital. This caliph called in the head physician of the hospital of nearby Gundishapur, known as Jirjis Bukhtyishu (Jesus Saviour), in order to treat his none too serious stomach ailment (dyspepsia). The successful treatment by Jirjis was the beginning of collaboration with the scholars of Gundishapur, and it promoted an exchange of ideas with the Greek and Persian cultures. Under his rule the first translation into Arabic of astronomical texts took place under the supervision of an Indian astronomer visiting his court. Extant fragments of this work, written by al-Fazari and Tariq, reveal a mixing of Indian knowledge with elements of Persian and Greek origin (from before Ptolemy). These also reflect the use of the more advanced Indian calculation methods.

Under the rule of Al-Ma'mun the Great (813-33), the seventh Abbasid caliph, a short-lived but genuine interest in the foreign sciences developed, after which they became suspect again. It is difficult to determine the exact nature of the involvement of Al-Ma'mun because of the paucity of documents; in this respect the Fihrist account⁽²⁰⁾ lacks detail and it is out of date (first published in 938). Saïd al-Andalusi, a leading philosopher of 11th century Muslim Spain, focused on India as a source of knowledge for Islam. He also tells that Al-Ma'mun was fond of scholars, the lawyers, the traditionalists, the theologians, the rationalists, the lexicographers, the annalists, the mathematicians and the genealogists. He was thus interested in the people who had Islamic expertise, the 'ulemas', those versed in Islamic legal deliberations. The traditionalists are the specialists of the 'hadith', the written accounts of the oral traditions relating to the words and deeds of Mohammed, accounts that are much larger than the Koran itself. The theologians, then, were the mu'tazilites⁽²¹⁾, a word cognate with 'pharisees', the biblical experts in Jesus' time. To the mu'tazilites, the ideology and way of doing of their great prophet was the starting point and end of their reasonings, and the Koran was their ultimate work of reference. The lexicographers were versed in the language of the Koran, whilst the genealogists knew how to collect and rank in compendiums, the Tabaqat, the many biographies of Mohammed and his companions as well as the later founding figures in Islamic history. Because al-Andalusi wrote



Coin of Al-Ma'mun the Great

in the 11th century, when the interpretative gate (Ijtihad) was solidly closed, we cannot expect him to have written about Al-Ma'mun's interest in the Greek speculative works. Nonetheless, it seems more than likely that Al-Ma'mun's first interest was not in the Greek speculative sciences, nor in the Indian and Greek mathematics for the sake of mental exercise, though astronomy, based on mathematics, could be used in the service of Islam. It was useful to astrology, which has always remained an important part in Islam, and it helped to construct mosques towards the 'direction of the qibla' (prayers must face Mecca). Mathematics thus became an important part within the Islam.

Al Ma'mun's mother was Persian. He moved his capital to Merv in Persia, to relocate it afterwards to Baghdad, therefore back to the west. In view of his Persian background, it is quite safe to assume that Al-Ma'mun was also interested in Greek speculative sciences, though on a much lower plane than the "ilm", which concept targets the body of Islamic knowledge as a reflection of the God who is One. Ilm implies that any knowledge that does not proceed from Islamic doctrine is kafr or "*that which covers the truth*", which in their eyes is a very serious accusation indeed.

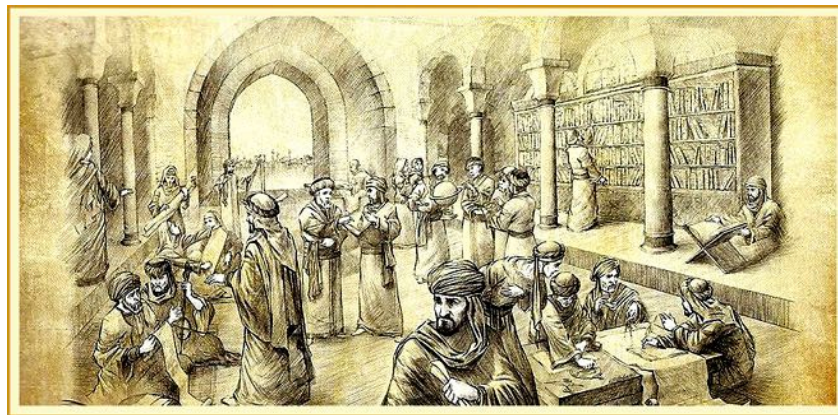
Under Al-Ma'mun's guidance the translations of Aramaic and Pahlevi into Arabic increased. At the same time translations from Greek works into Aramaic continued. A translator of exceptional abilities was the Nestorian Christian Hunayn ibn Ishaq (809-873), called the prince of translators. He is better known as Joannitius. Arabic at the time lacked scientific terms and had to be invented from scratch by the Christian translators/transcribers. The inherent mode of thinking and the linguistic structure of Arabic make the conversion from Greek into Arabic a hazardous enterprise, though not impossible. The Hebrew language is a case in point. Hivrit (modern Hebrew) has the primary characteristics of Arabic but is nevertheless suitable to perfectly express modern philosophical thought and scientific reasoning. It was Hunayn ibn Ishaq who succeeded in inventing the medical terminology in Arabic, a feat of monumental proportions, for which he needed grammatical knowledge of and fluency in Greek, Aramaic and Arabic. He worked without the cooperation of Muslim scholars, who were more interested in historical works, legal and military writings and, of course, the commentaries on the Koran. It should be noted that in spite of the excellency of ibn Ishaq's work, the ancient Arabic translations of the Greek philosophers often lack precision and clarity and much worse, they show quite a number of distortions and interpolations, not indicated as such in the body of text.

Al-Ma'mun is the only caliph in Islamic history who to some extent was interested in the sciences as previously understood in the West (medicine, philosophy and mathematics), known in Arabic as "falsafa", a word derived from the Greek "philosophia".⁽²²⁾ In Baghdad Al-Ma'mun finished the construction of the Bayt al-Hikmah or House of Divine Wisdom (hikam, a different word than hikmah, means physician), a work probably started by his father, the caliph Harun al-Rashd, to which a library and an astronomical observatory were joined, and which attracted a number of scholars from Gundishapur and the Persian centre of Nisibe (the importance of Nisibe is not clear). Supported by the state treasury, this institute became the centre of gravity for studies in Islamic thought.

Because the translations of Greek works in Arabic started at a time when Islam was still struggling to establish its doctrine and in an era when Arabic was not yet the current language, it would have been strange if some kind of exchange had not taken place between the subject cultures and the rulers of Islam. The practice of medicine gave the opportunity to have cordial relations. Yet it is a gross exaggeration to call the House "*a vibrant meeting place and major intellectual centre of the Islamic Golden Age, to which the West owes so much*". Islamic Golden Age sounds nice, but I am still wondering what it means. The House has been called "*this excel-*

lent research and educational institute and unrivalled centre for study". The terminology fits some of our present day institutes, but it means nothing when applied to an organisation of the 9th century, be it the Vatican or Bayt al-Hikmah. Sylvain Gouguenheim is of the view that the importance given to the House of Wisdom is much exaggerated, though he concedes that Baghdad maintained a climate that favoured intellectual development in the pursuit of science perse and not only for its practical application. Of course, the House fitted in that scheme. Gouguenheim's explanation deserves our attention here: ⁽²³⁾

«« What need did the Bayt al-Hikmah respond to and what was its nature? Marie-Geneviève Balty-Guesdon has given precise and solidly founded answers to these questions. ⁽²⁴⁾ Under (Caliph) Harun al-Rashid, this House was a private library for the use of the caliph and those close to him. It was not opened to scholars until Al-Ma'mun, but was then reserved to Muslims specialising in the Qu'ran and astronomy, such as Yahya ibn Abi Mansur, Al-Khwarizmi and the Banu Musa brothers. Its doors were never opened to Christians or Jews. Far from being a meeting place of the religions or of the elaboration of philosophical knowledge, those using it reflected on the nature of the Qu'ran when the mu'talizite current manifested itself: a meeting of mu'talizite traditionalists, jurists, lexicographers and theologians is said to have been held there according to the testimony of the Kitab la-Hayda of Abd al-Aziz al-Kinan.



Bayt al-Hikmah

Translations were also made there, doubtless from the time of Harun al-Rashid, in particular under the ægis of the Persian Salm, who translated Persian works into Arabic and was the first director of the Bayt al-Hikmah. But the House of Wisdom was far from centralising the body of translations made under the Abbasids, which – like the teaching of medicine or philosophy – were practised in a dispersed manner, in private, in the houses of the literate. The caliphs interfered little in this domain, even though Al-Ma'mun charged Hunayn ibn Ishaq with the responsibility of checking corrections made by others. At any rate, one never sees the great Christian or Sabeian translators associated with the Bayt al-Hikmah. Hunayn ibn Ishq mentions this nowhere and nothing supports the affirmation, often made, that he would have directed that institution. Which confirms that the latter played no part in the translation of the Greek scientific and philosophical texts, let alone that there was some kind of imaginary collaboration between scholars from the three monotheisms.

Similarly, the House of Wisdom was not a teaching establishment, still less a university: only the three Banu Musa brothers, who came under the caliph's wing after the death of their father, found refuge there and followed their scientific education. After Al-Mutawakkil came to power in 847 and the definitive ban on discussing the nature

of the Qu'ran came into effect, the House of Wisdom became a simple library and (according to Balty-Guesdon) its activity would seem to have disappeared as early as the 10th century. The Bayt al-Hikmah lies at the origin of a fairy tale, a very seductive one, but a fairy tale nonetheless. »»»

3.4 – *The closing of the gate of Ijtihad*

Seyyed Hossein Nasr, who is a great authority in the field, gives an interesting rationale for the involvement of the Islamic community in the sciences. I now quote: ⁽²⁵⁾

«« The great interest (of the early Islamic community) in pre-Islamic or what is traditionally called awa'il-sciences – that is, sciences that existed 'in the beginning', before the rise of Islam (deserves our attention). They became part of the affairs of the state to an extent that cannot be explained solely by the personal interest of an individual ruler such as Caliph Harun al-Rahsid or his successor al-Ma'mun, however important such interest may have been. The real cause for this sudden interest on the part of the Islamic community at the beginning of the 9th century in non-Islamic sciences, especially in Greek philosophy and science, in contrast to the at best sporadic interest of the previous century, must be sought in the new challenge that Islamic society faced. This challenge came from the theologians and philosophers of the religious minorities within the Islamic world, especially the Christians and Jews. (Remark: a sociological minority is not necessarily a numerical minority; at the time the Christians and Jews were a majority.) In the debates carried on in cities like Damascus and Baghdad between Christians, Jews and Muslims, the last-named group often found itself on the losing side, for they were unable to defend the principles of faith through logical arguments, as could other religious groups, nor could they appeal to logical proofs to demonstrate the truth of the tenets of Islam. The interest of the Caliphate in making Greek sciences available in Arabic most likely stems from this challenge, which might very well have affected the role of religious law in Islamic society, upon which the authority of the Caliphate itself was based. It was therefore for the purposes of safeguarding the interests of the Muslim community that the early Abbasid Caliphs turned the attention of the (Qu'ranic) scholars to the study of Greek philosophy and science. »»»

As Islam came into contact with Near-Eastern Christianity many of its truths came under scrutiny. Islam, still in its formative years, was forced to more closely define itself in the confrontation with Christianity and Judaism, for which they looked to the Greek method of argumentation. Dominique Urvoy, a well-known Islam specialist, underlines that in effect the Muslim world borrowed the Greek technique of reasoning, though only partially. As regards the three-term syllogism, Islam prefers to associate a predicate with a subject according to the ancient manner of reasoning with two terms, where there is a passage from the first to the second via a 'cause'. ⁽²⁶⁾ Sylvain Gouguenheim states clearly that contrary to what happened in the Middle Ages in Europe, Islam only borrowed from the Greeks what it regarded as useful; it left the spirit behind. Neither the Greek literature nor the tragedy or philosophy entered Muslim culture. ⁽²⁷⁾ If logic did find a place there, it was in greatly constrained conditions, as shown by Hunt Janin and André Kahlmeyer in their book on Islamic law, which I quote briefly here: ⁽²⁸⁾

«« Consider, for example, two hypothetical cases cited in "al-Minhaj", a medieval manual of Islamic law written by the Syrian scholar Muhyi al-Din al-Nawawi, who died in 1277. This book was widely used as a textbook for students and as a reference book for scholars and judges. This is what we can learn from it: If a husband calls one of his wives and another answers and he says to her: "You are repudiated" [meaning "I divorce you"], believing himself to be speaking to the wife he called, she that answers is repudiated...

If a woman has a date in her mouth and her husband repudiates her on the condition she swallows it, and then changes his mind and makes it depend on her spitting it out, and then changes his mind again and makes the repudiation depend upon her taking the date in the hollow of her hand, and the woman on hearing these words quickly swallows half the date and spits out the other half, the condition is not considered to be fulfilled. »»»

In fact, as Janin en Kahlmeyer discuss in the Introduction to their book, there are few general concepts of the theocratic Sharia, which is the Islamic legal order – in fact, a penal code. Though loosely defined, it regulates all facets of life, even down to the tiniest details. (Unfortunately, in our present democratic societies the laws are becoming ever more intrusive, being clearly oppressive and incoherent, guided by the whims of a manipulated general opinion, and in that respect they resemble the Sharia.) The writers explain:

«« The classical (Islamic) law books do not contain separate chapters dealing with concepts or with comprehensive rules. (...) As the modern scholar Knut S. Vikør explains: *“The Sharia is best understood as a shared opinion of the community (umma), based on a literature that is extensive, but not necessarily coherent or authorized by any single body.”* This can make it quite difficult for outsiders to say exactly what the Sharia really is. Devout Muslims believe that a great deal about the Sharia lies beyond the boundaries of legitimate dispute. »»»

In Islam’s formative years, when it was growing into a large body and cultural system, the discussions centered on the true nature of the Koran. The earliest followers of Mohammed held that the Koran was pre-existent, but they did not believe that it was eternal and uncreated; instead, they saw it as the first thing created by God. This belief is most likely related to the Jewish legend that the Torah (in the Jewish tradition also called ‘Hokma’, with the same meaning as the Arabic ‘hikmah’) was the first thing created: *“In the beginning, two thousand years before the heaven and the earth, seven things were created: the Torah written with black fire on white fire, and lying in the lap of God. (...) When God resolved upon the creation of the world, He took counsel with the Torah.”* (“Legends of the Jews” by Rabbi Louis Ginzberg)

Al-Ma’mun was thinking of an elite layer of scholars and thinkers, headed by him, to specify Islamic teachings and fatwas (sharia rulings). He started an “investigation”, known as the Mihna. It involved questioning individuals about whether the Koran was created or not. All parties agreed that the Koran is the Word of God. Yet, the issue was whether the Koran is the created Word of God – al-Ma’mun’s position and that of the Mu’tazalites – or the uncreated one. This is related to the Christian concept of the Holy Trinity, in which the Father has the property of being unbegotten, with the Son being eternally begotten. Retaliatory measures were taken against those, the Ash’arites, who rejected the doctrine of the createdness of the Koran, including dismissal from public office, imprisonment and even flogging. The Mihna was ended after a struggle of about fifteen years by al-Mutawakkil, the Caliph then and a nephew of al-Ma’mun. He held the view that the Koran is uncreated. To state that the Koran was created, although it was before the creation of the world, would have been an overture to Jewry and Christianity... As already stated, he forbade any further discussions on the nature of the Koran. This was the first important step towards the “closing of the gate of Ijtihad”. Ijtihad is the process of free religious interpretation within Islam based on logical thinking, something that is closely linked to the legal domain. If the Koran was uncreated and preordained before creation, this means by implication that it is not subject to rational criteria: the uncreated remains as ever unphatomable. The position taken by al-Mutawakkil was a blow to any rational attempt to understand the reality in which we live. In the end it meant the fossilisation of the Islamic culture and an abhorrence of any systematic and rational scrutiny of our environment, for it is a denial of an objective and

goal oriented reality, which is a topic that has been brilliantly discussed by Robert Reilly in his book “The Closing of the Muslim Mind”.⁽²⁹⁾

In the following ages there were still a few exceptions to the obligatory way of thinking, but they were restricted to the individual sphere, an aspect that cannot be over-emphasized. A notable example is the Persian Al-Farabi (ca 872-951) who studied in Baghdad under a Nestorian priest. He paved the way for the work of Ibn Sina, known also as Avicenna (981-1037). Al-Farabi's ideas on the place of logical reasoning in matters of faith could have been borrowed straight from Thomas Aquinas, if we did not know better, for he lived in the 13th century. He had a few followers, but to call it a school is exaggerated. Whatever the case may be, his ideas have not been incorporated in the way of thinking within Islam, which time and again stresses that logical reason is in submissive service of the faith and can never be a tool for its investigation and should only be used to defend its dogmas and to nip in the bud the evil of any type of “innovation”, the bid‘a.

The final fossilisation of Islamic thinking is generally placed with the great thinker and jurist Al-Ghazali (1058-1111), based on the conclusions he made at the end of his life. Afterwards, the falsafa (the philosophies) were practically forbidden and, as a result, all chances of revitalising Islam or of making its interpretations more peacefully were permanently lost. In 1005 the Fatimid Caliph al-Hakim constructed the Dar al-ilm (House of Divine Knowledge) in Cairo, with a library that by some accounts had over a million volumes (or chapters), which in our definition equals 40,000 books, but this could not serve to revigourate the Islam. What is not wanted is not done! People who nowadays claim that Islam can be reformed from within are talking nonsense. Any current expectation of reforming Islam from within is a delusion, because even the slightest deviation from the rule is met with severe punishment. For example, in 1998 the Turkish journalist Nuredin Sirin was sentenced to 20 months in prison for writing that “*We must support the oppressed even if they are atheists*”.⁽³⁰⁾

3.5 – Mathematical science in Islam and its impact on the West

Mathematics were never considered an infringement on the character of Islam and was thus permitted, as early as in Al-Ma'mun's epoch. And Islamic scholars have applied much innovative thinking to it, which proved useful also to optics and trigonometry in which they excelled. They applied the Indian calculation system, the so-called modus Indorum (method of the Indians), which explains why they excelled. One of the distinguished members of the House of Divine Wisdom was Mohammed Ibn Musa Al-Khwarizmi (†835).⁽³¹⁾ Strictly speaking, the history of mathematics in Islam begins with him, in whose writings the Greek and Indian traditions of mathematics became united. He was the one who popularised the Hindu calculation system and introduced the zero as a unit of calculation. The word algorithm is derived from Al-Khwarizmi, after the title of the Latin translation of his most famous book “Liber Algorismi”. And it is said that the word algebra comes from the first two words in the title of that book in Arabic: “Al Jabr Wa'l Muqabalah”, meaning: “restoration by transposing terms from one side of an equation to the other”. Pythagoras, Euclid and Apollonius spent much of their time creating what were essentially abstract imaginations; how they arrived at a conclusion seemed more important than any application of it in the real world. Says George Gheverghese Joseph: “*The Arab approach to mathematics was no doubt helped in earlier years by the existence of a creative tension between the ‘algebra people’ and the ‘geometry people’ best exemplified by al-Khwarizmi and Thabit ibn Qurra, respectively. (...) Indeed, the main reason why modern mathematics moved away so substantially from the spirit and methods of Greek mathematics was the intervention of the Arabs.*”

In spite of its early application by the Muslims, we had to wait until 1202 when the Italian Fibonacci da Pisa published his “Liber Abaci”. Only then was the Hindu calculation system adopted here in the West – inclusive the zero. Fibonacci had learned his mathematics from the Muslims. In his book he introduced the Arabic numeral signs that the Muslims had largely borrowed from India. The zero was the greatest innovation of the book. The French mathematician Marquis de Laplace (1749-1827) called the zero “*a profound and important idea, which appears so simple to us now that we ignore its true merit. But its very simplicity and the great ease it lent to all computations put our (Western) arithmetic in the first rank of useful inventions.*” Liber Abaci advocated the decimal place value system and showed lattice multiplication and Egyptian fractions, by applying it to commercial bookkeeping, conversion of weights and measures, the calculation of interest, money-changing, and other applications. Because it allowed them to abandon the cumbersome counting board (the abacus), the Italian money lenders and merchants embraced the new counting method. The book was well received throughout the continent, and through its applications had a profound impact on the developments within society and the sciences. (see also “The History of Zero” by Barbara Nolan)

Notes

How Mohammed got his name

(13) Mohammed means “the blessed” or “worthy of praise”. There is reason to doubt whether he carried this name from childhood. He could have taken it when his mission started. In his biography of Mohammed, Adil Salahi narrates that Aminah, the mother of the boy, heard voices commanding her to call her child Mohammed, though it was an unfamiliar name in Arabia; nevertheless, Abdulmuttalib had no hesitation in calling his grandson by that name, instead of naming him after Abdullah, Mohammed’s deceased father; he could never dismiss the thought that the events which led to the birth of this child suggested that he was certain to have great influence on the life of his community; when he was questioned by the notables of Mecca about the unfamiliar name he had given to his grandchild, he answered that he wished the boy to be praised by human beings on earth and by Allah in heaven.

(14) “Muhammad: Prophet and Statesman” by William Montgomery – Oxford University Press # 1961 (pp. 102-09).

(15) “Islamic Terrorism” by Patrick Sookhdeo - Isaac Publ., England # 2004 (pp. 102-03).

(16) “In the land of invisible women – a female doctor’s journey in the Saudi Kingdom” by Qanta A. Ahmed MD – Sourcebooks Inc., Illinois USA # 2008 (pp. 177-78).

(17) The Egyptian historian al-Maqrizi (1364–1442) describes the unslaughter in Alexandria by the Muslim conquest in his monumental work al-Khitat (the quarters), translated into French by Urbain Bouriant as “Description topographique et historique de l’Égypte” (Topographical and historical description of Egypt) - Paris # 1895-1900.

(18) “The Goal of the Human Race” by R. F. Grau – Simpkin, Marshall & Co, London # 1892 (pp. 88, 91).

(19) “The Battle of Arbela (vol. 10 of Decisive Battles of the World)” by Sir Edward S. Creasy and Sir Edward Sheppard – Colonial Press, New York # 1900 (p.62).

Ibn al-Nadim’s “Kitab al-Fihrist”

(20) Abu’l-Faraj Muhammad ibn Ishaq al-Nadim (+995 or 998) was a Shi’ite Muslim scholar and bibliographer. He is famous as the author of the Kitab al-Fihrist, published in 938. He was a bookseller and a calligrapher, who copied manuscripts for sale. He lived in Baghdad. He be-

longed to the circle of a son of the “Good Vizier”, whom he praises for his profound knowledge of the logic and the sciences of the Greeks, Persians and Indians. In view of his trade, Ibn al-Nadim had the occasion to meet many people. With his circle of friends, none of whom was an orthodox Sunni, he shared an admiration for philosophy and especially for Aristotle, and the Greek and Hindu sciences of antiquity (pre-Islam). He also met at his house the Christian philosopher Ibn al-Khammar. His great book, the *Fihrist*, gives testimony to his knowledge of pre-Islamic Persia and its literature in classical Islamic civilization, but unfortunately only a minute sample of the numerous Persian books listed by Ibn al-Nadim is still extant, the rest probably having been destroyed because not considered “ilm”. According to *Fihrist*’s brief preface, it is meant to be an index of all books written in Arabic, whether by Persians, Arabs or others.

The mu‘tazilites

(21) Contrary to what is sometimes stated, mu‘talizism scarcely seems to have been influenced by Greek philosophy. On the one hand, it appears at the beginning of the 8th century, thus before the translations made by the Syriacs. One could, at a push, find there a trace of Platonic concepts, but no imprint of Aristotelian principles; from Greek thought it only borrows “the theories compatible with the principles of the Koran”, its eventual aim being to rationalise the creationist doctrine of the Koran, without harming it. Thus writes Sylvain Gouguenheim in his book “Aristotle at Mont Saint-Michel” (p. 154) referring to A. Badawi: “Histoire de la philosophie en Islam” (The history of philosophy in Islam) (p. 254).

Al-Ma‘mun was the only caliph interested in the sciences

(22) See the appendix with an excerpt of Sylvain Gouguenheim’s book “Aristote au Mont Saint-Michel” (Aristotle at Mont Saint-Michel). The book, while not contending that there is an ongoing clash of civilisations, makes the case that Islam was impermeable to much of Greek thought, that the Arab world’s initial translations of it into Latin were not so much the work of “Islam” but of Arameans and the Christian Arabs, and that a wave of translations of Aristotle began at the Mont Saint-Michel monastery in France fifty years before Arab versions of the same texts appeared in Moorish Spain. The two main papers in France considered the book in prominent reviews. “*Congratulations*”, *Le Figaro* wrote. “*Mr. Gouguenheim wasn’t afraid to remind us that there was a medieval Christian crucible, a fruit of the heritage of Athens and Jerusalem*”, while “*Islam hardly proposed its knowledge to Westerners*”. *Le Monde* was even more receptive: “*All in all, and contrary to what’s been repeated in a crescendo since the 1960s, European culture in its history and development shouldn’t be owing a whole lot to Islam. In any case, nothing essential.*” Gabriel Martinez-Gros, a professor of medieval history, and Julien Loiseau, a lecturer, described Gouguenheim’s thesis as “*re-establishing the real hierarchy of civilizations*”.

(23) “Aristote au Mont St-Michel” by Sylvain Gouguenheim - Seuil, Paris # 2008 (pp. 134-35).

(24) Here is note 28 to chapter IV of Gouguenheim’s book:

« « “Le Bayt al-Hikma de Bagdad” by M.-G. Balty-Guesdon - Arabica 39 # 1992 (pp. 131-150). She particularly exploited the sources dealing with this House of Wisdom: the biobibliography of the “*Fihrist*” by Al-Nadim, the “*Risala*” by Hunayn ibn Ishaq, the biographies of scholars such as the “*Uyun al-anba fi tabaqat al-atibba*” by Ibn Abi Usaybi‘a - N. Rida, Beirut # 1965, the “*Ta’rih al-hukama*” by Al-Qifti - J. Lippert, Leipzig # 1903; or the more general ‘*tafaqat*’ (biographies) such as the “*Wafayat al-a’yan d’Ibn Hallikân*”, published by M. Abd al-Hamid, Cairo # 1948/49, and the “*Mu’gam al-udaba*” by Yaqut - A. F. Rifa’i, Cairo # 1936/38. » »

(25) “Science and Civilization in Islam” by Seyyed Hossein Nasr - Harvard University Press # 1968 (p. 70).

(26) “Histoire de la pensée arabe et islamique” (History of Arabic and Islamic thought) by Dominique Urvoy - Éd. Seuil, Paris # 2006 (p. 157).

(27) Sylvain Gouguenheim, *ibid* (p. 164).

(28) “Islamic Law – The Sharia from Muhammad’s Time to the Present” by Hunt Janin and André Kahlmeyer - McFarland & Co., London # 2007 (pp. 3 and 5).

(29) “The Closing of the Muslim Mind – How intellectual suicide created the modern Islamist crisis” by Robert R. Reilly - ISI Books, Wilmington, Delaware # 2010.

Censorship and persecution in the name of Islam

(30) • **“Censorship and persecution in the name of Islam”**

© Assyrian International News Agency, posted on Sept. 1, 2007.

• **“The plight of a Muslim intellectual”**

by Dr. Hasan Abbas, © International Humanist News, posted on Dec. 7, 2006.

• **“Kuwaiti columnist Ahmad Al-Baghdadi on Arab political culture”**

by The Middle East Media Research Institute (© MEMRI), posted on Nov. 21, 2001.

• **“Progressive Kuwaiti intellectual Al-Baghdadi requests Political Asylum”**

by The Middle East Media Research Institute (© MEMRI), posted on April 8, 2005.

• **“Turkish PM slams Internet apology to Armenia”**

by Euro News, posted on December 18, 2008.

(31) Ibn Musa came from Khwarizmi, a region situated south of the Aral Sea in the 9th century.



APPENDIX

The Great Men of the Greek-Christian Science

Taken from the book: “Aristote au Mont Saint-Michel – les racines grecques de l’Europe Chrétienne” (Aristotle at Mont St-Michel – the Greek roots of Christian Europe), by Sylvain Gouguenheim, Professor of Mediæval History at l'Ecole normale supérieure de Lyon, published by Éditions du Seuil, Paris # 2008, last part, chapter II.



In the book we find to start with, a quotation from Jean-Pierre Vernant:

“To a large extent, the Greeks invented us. Notably by defining a type of collective living, a kind of religious attitude and also a species of thought, of intelligence and of intellectual techniques which we largely owe to them. The history of the West starts with them.”



In the first row of Syriac scientists there are three men who deserve a more detailed presentation: Hunayn ibn Ishaq, Théodore Abu Qurra and Jean Mésué.

A – The ‘prince of translators’: Hunayn ibn Ishaq (803-873)

Hunayn ibn Ishaq (known as Johannitius during the entire Middle Ages), born in Hira, was a perfectly trilingual Nestorian Arab: Arabic was the language of the town of his birth, Syriac was his mother’s native tongue and he learned Greek in Alexandria. He was thus an authentic hander-on of culture, while remaining fiercely faithful to his own, defending it with the ardour of the Christian faith. Doctor, translator, philosopher and theologian: he attained celebrity by curing the Caliph al-Mutawakkil (847-861).

One hundred or so works are attributed to him in the most varied fields, including philology: he created a Greek-Syriac dictionary and a manual for the translation of Greek to Arabic. The two main branches of his activity were medicine and philosophy. A great many of his medical books were composed in Syriac. Though he dealt with all the medical disciplines he shone particularly in ophthalmology and dental care: he wrote three works on ophthalmology, including “The Ten Treatises on the Eye”, a veritable encyclopædia with a detailed guide on how to perform a cataract operation. He also wrote a treatise on dentistry, taken up again by al-Razi, and which Avicenna pillaged for his “Canon” without quoting it once. He was both an original author and a

translator-commentator of Galen and Hippocrates – the greatest transmitter of Greek medicine to the Arab world.

(The single most influential book on medicine up to the 18th century was the “Al-Qanun fi al-Tibb” or “The Canon of Medicine” completed in 1025. It was written by Avicenna with the intention of producing the definitive work on medicine. The book was based on a combination of his own personal experience, medieval Islamic medicine, the writings of the Roman physician Galen, the Indian physicians Sushruta and Charaka, and Persian medicine, in addition to aspects of Chinese materia medica. The Canon is considered one of the most famous books in the history of medicine. Among other things, it is known for the discovery of the contagious nature of infectious diseases, the introduction of quarantine to limit the spread of contagious diseases, and the introduction of evidence-based and experimental medicine, clinical trials, randomized controlled trials, efficacy tests, clinical pharmacology, and the idea of a syndrome in the diagnosis of specific diseases.)

Hunayn ibn Ishaq surpasses all other translators, hence his sobriquet of ‘prince of translators’: he translated 104 of Galen’s works, including the treatises on dissection (muscles, arteries, veins, uterus) and the writings on the anatomy of the eye. Having founded a school of translation, he surrounded himself with numerous collaborators, almost all Nestorians: Hubaysh ibn al-Hasan al-A’sam (who translated the Hippocratic oath, a work used by Al-Razi); Ishaq ibn Hunayn, his own son, author of works on philosophy and mathematics; Isa ibn Yahya ibn Ibrahim, Ibn Shadhi, Yusif al-Khuri, Ibrahim ibn Salt, etc. It should be noted that Ishaq ibn Hunayn collaborated with Theodore Abu Qurra to provide a correct Arabic version of Euclid’s “Elements”, of which only a summary had been elaborated on the basis of a Syriac text during the Caliphate of Harun al-Rashid.

As regards philosophy, Hunayn ibn Ishaq translated almost all of Aristotle’s works, as also Plato’s “Laws”, “Timæus” and the “Republic”! He made known more than 200 works of this kind.

As well as quantity, Hunayn ibn Ishaq is known for the quality of his work. Before his time the Greek and Arabic translations were extremely defective. While it is true to say that the differences between the two language systems made for an arduous task, the translators were unfortunately happy enough to make a word-for-word translation, which ended up in most cases producing incomprehensible phrases. The Syriac speakers were less encumbered by this problem because their language was close to Arabic and they had already had the experience of the passage from Greek to Syriac. Going from the latter to Arabic posed very few real difficulties. But, in particular, Hunayn ibn Ishaq seems to have been the first to take charge of the phrases as a whole, to take the trouble to understand and render their overall meaning.



B – Theodore Abu Qurra (Thābit ibn Qurra) (836-90)

This Sabean, a remarkable philosopher and mathematician, was the author of thirty-four books of mathematics, thirty or so on astronomy, eight on astrology and five on meteorology. He is certainly one of the best mathematicians of the Middle Ages. And he too is missing from our scholarly manuals... In his youth he met the eldest of the Banu Mua brothers, Muhammad, a mathematician and astronomer, at whose side he learned the basics of the two disciplines. These three brothers, Muslims, had had a master who seems to have been a Christian Arab. Theodore succeeded them at the head of the school that they had established and in his turn, he founded a dynasty of scholars including the mathematician Ibrahim ibn Sinan, his grandson († 946).

Abu Qurra (836-901) was both translator and researcher. His numerous translations include Archimedes' "De sphæra et cylindro", Books V and VII of the "Cronica" of Apollonius and the "Introduction to Arithmetic" by Nicomachus of Gerasa. He also revised the translations of Euclid and Ptolemy made by other Christian scholars.

His mathematical work was particularly innovative in geometry, algebra and the theory of numbers. We also owe him several brilliant results: he was the author of the first theorem of amicable numbers and he succeeded in calculating the integral of the function of the square root of x , finding the primitive root of x , $2/3$ (x to the power of $3/2$).

In fact, he was particularly interested in infinitesimals (objects so small that there is no way to see them or measure them) and managed to determine the surface of a segment of parabola using a method different from the one Archimedes employed. In the same way, he calculated the surface of a paraboloid deviating from the techniques invented by Archimedes in his treatise on conoids and paraboloids.

We can appreciate his method by examining the way he estimated the surface of an ellipse and that of a cylinder. Let us take the example of the ellipse. In order to measure its surface he proceeds to a calculation of limits: he assimilates the surface of the ellipse to the limit of the sum of the surfaces of the polygons inscribed in the ellipse, i.e. on the one hand he calculates the sum of the surfaces of the inscribed polygons and, on the other, that of the surfaces of the polygons exteriorly tangential to the ellipse, thus elaborating on a method originating from the Greeks to calculate the area of a circle. The difference between the two sums gives him a good approximation of the error committed on the surface of the ellipse. Agreed, he does not escape from the framework of the geometric methods but the passage to the limit nonetheless proceeds from the analysis. Nobody outperformed Abu Qurra in the domain of infinitesimals up until Leibniz in the 17th century who fundamentally structured this branch of analysis.

C – John Mésué (Yuhanna ibn Masawayh) (776/780-855?)

Born during the Caliphate of Harun al-Rashid, this Nestorian Christian was the master of Hunayn ibn Ishaq and the author of a colossal body of work. Doctor, philosopher and logician, he was interested in the basics of mathematics. He was also reported to have been involved in an important body of translations, though there is now no longer any trace of this and specialists doubt its existence. Whatever the case, he was the first Nestorian medical doctor to have written directly in Arabic and he is said to have composed forty or sixty treatises, including "The Book of Dissection". Under the title of "The Alteration of the Eye" he drew up the first work on ophthalmology in Arabic, as also "The Book of the property of Foodstuffs", the first Arabic text on dietetics plus the first Arabic treatise on mineralogy. He also wrote "Medical Rarities/Aphorisms".

D – Conclusion

It would be somewhat reductionist to limit the world of Jewish and Christian scientists to these three names. Many other men were known for their achievements in the fields of medicine, mathematics and astronomy. Nor was philosophy forgotten: the group of commentaries on Aristotle's "Organon" (on logic), the work of a dynasty of Syriac men of letters, is thus preserved in an 11th-century manuscript in Paris. And even if we were to confine ourselves solely to the Nestorians, the list would be impressive. Naming them all would be a tiresome task, but to remain silent regarding their activities would be to falsify history – and the reader can consult the appendix at the end of "Aristotle at Mont St-Michel", its information being drawn from the works of specialists in the question, such as R. Le Coz, and constituting a rapid analysis of the enormous cultural work of the Nestorians.

Several Jewish scientists must be added to this list, especially Masarjawayh, who lived in the reign of Umar II in the early 7th century (he is said to have been born around 636 at Basra, southern Iraq). He is known as the author of the first medical treatise in Arabic, a translation of the "Kunnash" of Ahrun (doctor in Alexandria, contemporary of Justinian). His two sons and his grandson were all authors of several medical treatises (ophthalmology, dietetics) and pharmaceutical compendia. As for Masa'allah, astrologer and astronomer originally from Basra, he served the caliphs of Baghdad during the late 8th and early 9th centuries († 815). This man who spoke Persian, Indian and Greek was at the origins of Arabic astrology.

If Greek knowledge and science were saved in the frontier territories of the Byzantine Empire, they owe their survival to the secular efforts of these Christian communities – to which the Egyptian Copts must be added. Though beaten and oppressed, these communities still continued to foster and transmit their culture. In the end it is to them that the Western world owes an immense debt.

In fact, these Christian men of science, Arabised through political and administrative necessity, delivered themselves up to a vast work of translation of the scientific and philosophical works of the Greeks – and also to remarkable innovations. Writing in the first place for themselves, they nonetheless spread Greek science in texts written in Syriac, before elaborating a colossal work of translation into Arabic, thereby creating the scientific vocabulary of that language. For more than three centuries – from the 7th to the 10th – the 'Arabo-Muslim science' of the 'Dar al-Islam' then became in reality a Greek science thanks to its content and inspiration, Syriac and thereafter Arabic thanks to its language. The conclusion is obvious: the Muslim East owes practically everything to the Christian East. And it is this debt that we often keep silent about today, not only in the Muslim world but also in the West.



The Ascent of Man and Science *in confrontation with the* *Mysterium Coniunctionis*

Introductory note: After the expulsion of ‘Greek thinking’ from Europe by Emperor Justinian, Europe was revisited again via the bridge of Muslim science. In the first instance, however, it was the European approach that managed to mould Greek thinking into a truly Christian vision.

‘Europe Revisited’ (4) (8th until 13th century)

4.1 – Gerbert of Reims, the Stupor Mundi (astonishment of the world)

Not long after the institution of the al-Hikmah – we are still in the second half of the 8th century – the Persians had come to dominate all branches of government. Their unrivalled dominance in the affairs of the caliphate led to the spread of Persian medicine and astrology, and its corollary mathematics and astronomy, throughout the Arab world. Spain, which never recognised the Abbasid caliphate, also benefited. Quite a few famous Muslim thinkers, including those from Spain, had until the 13th century their educational roots in Baghdad, which became a large city second in size only to Constantinople. Baghdad was not a university in the modern and Western meaning of the word, but rather an Islamic theological faculty. The Muslims were only interested in Greek or Persian sciences as far as applicable to an understanding of their religious books, astrology and the establishment of the festive lunar calendar. Nonetheless, works of Arab-Christian scholars continued to be spread across the Islamic realm, which explains why, later on, Spain served as a rapprochement to the West. This was especially the case after Toledo had become a Christian town again. The reconquest of the Taifa kingdom of Toledo took place in 1085 and subsequent Muslims attempts to recapture it failed miserably.

It was during his three-year stay in Seville and Cordoba, two Moorish towns in Spain, that Gerbert of Reims (ca 945-1003) became acquainted with a number of Arab works on mathematics and astronomy through his Christian teachers, who dressed and talked like the Arabs. He also learned to put them into practice. Gerbert is also called ‘of Aurillac’ after the place where he stayed upon ordination. Probably he took home from Spain a few works on Greek philosophy, for he was a collector of books. Upon his return he impressed Pope John XIII with his superior erudition. Says Henry Osborn Taylor: “Gerbert was the first mind of his time, its greatest teacher, its most eager learner, and most universal scholar.” ⁽³²⁾ His teachings covered the whole range of the seven liberal arts, logic and rhetoric, and no less than mathematics and astronomy. He astonished his contemporaries by his use of astronomical instruments, like the astrolabe, which, simple though they were and which still lacked the zero, appeared to them almost divine. Gerbert’s main scientific works are “De numerorum divisione and Regula de abaco computi”, in which he introduced a restricted form of the Indian or decimal calculation system (no zero), which is taught today at primary school. ⁽³³⁾

In 972 he was commissioned to direct the cathedral school in Reims, which he did with resounding success. He also spent two years in Bobbio in Italy where he gave courses in mathematics, astronomy and Aristotelian logic (the latter based on Latin sources). The pupils of these schools spread over the whole of Europe. Saint Fulbert was to become his most celebrated pupil. In 990 Fulbert opened a school at Chartres which soon became the most famous seat of learning in France and drew scholars not only from the remotest parts of France, but also from Italy, Germany, and England. This is how it all started and how Gerbert helped to introduce Greek sciences to the West. Despite his many duties Gerbert, who was to become Pope, still found time to compose various scientific works. He shows himself in these writings more a pupil of Boethius than a continuator of the Arabs. For one thing, he still refused to introduce the zero or the “void”, at that time still considered a dangerous philosophical concept. I think it meaningful, in this respect, that the head of the Holy Roman Empire, Otto III, decided to remove to a more honourable grave the remains of Boethius and that the inscription on his new tomb was composed by the emperor’s old tutor, Gerbert himself.

The dual truth within Islam

For the individual Muslim, two contradictory things can be simultaneously true, meaning that he lives in a dualistic world: two irreconcilable paradoxes can at the same time be true. In his experience, truth is dependent on time and place. Muslims cannot deny the principle of untruth in itself. And thus they have projected it onto the ‘unbelievers’. Because of this dualistic way of thinking, a lie in the Islamic world has a totally different meaning than in the Judeo-Christian. Since, for a Muslim, two contradictions can be simultaneously true, he generally does not know that he is lying. And therefore he cannot be unmasked, since unmasking assumes that he who lies has a certain awareness of the fact that he is lying. That is one of the reasons why a religious and social dialogue between the Western and Islamic cultures is doomed to failure from the outset.

4.2 – Boethius, a schoolmaster of the West



Boethius

Until the beginning of the 12th century the intellectual energy on the European continent was spent on a revival of the Latin heritage: Roman law, the classics of Latin poetry, of philosophy and theology derived from Boethius and the Latin Fathers. Until then, little was derived immediately from the Greek. Throughout the Middle Ages Boethius (ca 480-524) was an important factor. As they say: *“This was the man who once was free to climb the sky with zeal devout, to contemplate the crimson sun, the frozen fairness of the moon.”* He was born at about the same time as Justinian, and lived in a time when the Greek classics were still easily available here

in the West. He was a philosopher and statesman born of a patrician Roman family. He studied in Athens and there gained the knowledge that later enabled him to produce translations of – for example – Plato, Aristotle and Porphyry, to which he added his own commentaries. What was left of his writings is called the “Logica vetus”. They were to become the standard work on logic in mediæval Europe.

A political conspiracy made an end to his life. While in prison, he wrote the “De Consolatione Philosophiæ”, or “On the Consolation of Philosophy”, which for the next millennium was probably the most widely-read book after the Bible and it was so much admired that the first translation into English was made by an English king. As is written in The Consolation:

«« There is freedom (...) for it would be impossible for any rational nature to exist without it. Whatever by nature has the use of reason has the power of judgement to decide each matter. Human souls are of necessity more free when they continue in the contemplation of the mind of God. (and further down:) Man himself is beheld in different ways by sense-perception, imagination, reason and intelligence (...) But there exists the more exalted eye of intelligence which passes beyond the sphere of the universe to behold the simple form itself with the pure vision of the mind. »» (Vol. V p. 4, 15; or digital version: p. 70, 75)

To quote Brian Keenan, who in the 1980s was incarcerated by the Hezbollah (fools of Allah):

«« Most philosophies are about systems of thought, but Boethius’ work seeks to move this definition to a more sublime classification. The author presses at the limits of language and conceptual thinking and by so doing prises open the barred door, and reveals the capacity of man to forge his own freedom in the darkness of his cell. Perhaps if I had read Boethius instead of avoiding the mediæval world in my adolescent years I might have come to terms with my own incarceration sooner. But that I find in Boethius’ work an echo of my own imprisoned thinking is something more than a consolation. It is an affirmation. »»

Boethius is called the last of the Romans and schoolmaster of the West. At a very early stage tradition began to represent Boethius as a martyr for the Christian Faith. The local cult of Boethius at Pavia was sanctioned when, in 1883, the Sacred Congregation of Rites confirmed the custom prevailing in that diocese of honouring St. Severinus Boethius on the 23rd of October. The theological works of Boethius include “De Trinitate” and two short treatises (opuscula) addressed to John the Deacon, who became afterwards Pope John I. In modern times, those who wanted to deny that Boethius was a true Christian, were, of course, obliged to reject the “Opuscula” as spurious. However, the publication of the so-called “Anecdoton Holderi” in 1877 closed the argument and permits us to consider Boethius a great Christian thinker.

4.3 – The Islamic concept of science

The West took up the challenge that was presented to it by Gerbert of Reims and continued to develop the sciences while in the Muslim world things ground to a halt – at a very early stage. We may wonder why, after the initial contribution to science made by the Muslim world, the later developments in science were to become the exclusive domain of the Christian civilisation. We have already given a number of reasons. Certainly it has some connection with the typical Islamic concept of creation.

I now borrow from the Introduction of Seyyed Hossein Nasr’s book, “Science and Civilization in Islam” (omissions in the text are not shown):

«« One might say that the aim of all the Islamic sciences is to show the unity and interrelatedness of all that exists, so that, in contemplating the unity of the cosmos, man may be led to the unity of the Divine Principle, of which the unity of Nature is the image. Islamic civilization as a whole is based upon the point of view that the revelation by the Prophet Muhammed is the ‘pure’ and simple religion of Adam and Abraham, the

restoration of a primordial and fundamental unity. The very word islam means both “submission” and “peace”, or “being at one with the Divine Will”.

The gnostic (he who aspires to knowledge) is Muslim in that his whole being is surrendered to God. He has no separate individual existence of his own. He is like the birds and the flowers in his yielding to the Creator. Like them, like all the other elements of the cosmos, he reflects the divine Intellect to his own degree. He reflects it actively, however, they passively. His participation is a conscious one. Thus ‘knowledge’ and ‘science’ are defined as basically different from mere curiosity and even from analytical speculation. The gnostic is from this point of view ‘one with Nature’. He understands it ‘from the inside’ – in fact, has become the channel of grace for the universe. His islam and the islam of Nature are now counterparts.

We now come to the central issue. Can our minds grasp the individual object as it stands by itself? Or can we do so only by understanding the individual object within the context of the universe? In other words, from the cosmological point of view, is the universe the unity, and the individual event or object a sign (phenomenon, appearance) of ambiguous and uncertain import? Or is it the other way around? Of these alternatives, which go back to the time of Plato, the Muslim is bound to accept the first. He gives priority to the universe as the one concrete reality, which symbolizes on the cosmic level the Divine Principle itself, although that cannot truly be envisaged in terms of anything else.

The world is covered as with a veil

When Seyyed Hossein Nasr explains that the Muslim investigator gives priority to the universe as the One concrete reality, which ‘symbolises’ on the cosmic level the Divine Principle itself, he expresses the fundamental Islamic thought that the world as we experience it is covered as with a veil (we see symbols of God), which means that the symbolic representation, called reality, is hiding the real truth. In the Islamic spectrum of thought the truth remains, as always, elusive. This may be true in the deepest sense, but our world is extremely consistent (predictable), which opens the world up for investigation and to ever improve our understanding. From the Western point of view inconsistencies are perceived inconsistencies, not real, and they mean that the object under consideration needs more attention, while trusting that by the understanding thus acquired the inconsistencies will disappear: these are not in nature, but in the mind. This is not the Islamic approach: inconsistencies are considered part of life. They tend to see inconsistencies on the same level as opposites, which is, of course, a logical error. (For instance: the powers of the air flow from a propellor and gravitation are opposites and are not inconsistent.) The Muslim is bound to regard them as an integral part of the same underlying reality and he feels no need to solve them. Muslim scientists exist, who have been educated here in the West and have proven to be excellent students, but their religious way of thinking puts them in a disadvantageous position as concerns really innovative thinking. This forms an obstacle to Islamic research in the field of the exact sciences (physics, chemistry, etc.) and might explain why in those sciences there has never been an Islamic Nobel Prize winner.

This is, to be sure, an ancient choice, but Islam does inherit many of its theories from pre-existing traditions, the truths of which it seeks to affirm rather than to deny. What it brings to them is that strong unitary point of view which, along with a passionate dedication to the Divine Will, enabled Islam to rekindle the flame of science that had been extinguished at Athens and in Alexandria.

The main instrument to attain ‘gnosis’ is within the Muslim mode of thinking always the intellect of which reason is its passive aspect and its reflection in the human domain. The exercise of reason, if it is healthy and normal, should naturally lead to the intellect. That is why Muslim metaphysicians say that rational knowledge leads naturally to the affirmation of the Divine Unity. Rational knowledge can be integrated into gnosis, even though it is discursive and partial while gnosis is total and intuitive. It is because of this essential relationship of subordination and hierarchy between reason and intellect, rational knowledge and gnosis, that the quest for causal explanation in Islam is only rarely sought to satisfy itself outside the faith – and never actually managed to – as was to happen in Christianity at the end of the Middle Ages. This hierarchy is also based on the belief that ‘scientia’ – human knowledge – is to be regarded as legitimate and noble only so long as it is subordinated to ‘sapientia’ – divine wisdom. Islamic gnostic tradition has been able to survive and to remain vital down to the present day, instead of being stifled, as elsewhere, in an overly rationalistic atmosphere.

The reaction against the rationalists, of which the writings of al-Ghazzali mark the high point, coincides roughly in time with the spread of Aristotelianism in the West, which led ultimately to a series of actions and reactions – the Renaissance, the Reformation and the Counter-Reformation – such as never occurred in the Islamic world. While in the West these movements led to new types of philosophy and science, the tide of Islamic thought was flowing back, as before, into its traditional bed, to that conceptual coherence that comprises the mathematical sciences. Today, as in the past, the traditional Muslim looks upon all of science as ‘sacred’ and studies this sacred science in a well-established articulation. This explains why the central figure in Islam has remained almost unchanging. He is the ‘hakim’, who encompasses within himself some or all of the several aspects of the sage: scholar, medical healer and spiritual guide. If he happens to be a wise merchant too, that also falls into the picture, for he is traditionally an itinerant person. It is clear, that such a man – even if his name is Avicenna! – will never be able to develop each of his several attainments in the same fashion as the single-faceted specialist may. Such specialists do exist in Islam, but they remain mostly secondary figures. The sage does not let himself be drawn into the specialist’s single-level ‘mode of knowing’, for then he would forfeit the higher knowledge. Intellectual achievement is thus, in a sense, always patterned upon the model of the unattainable complete, that ‘total thing’ that is not found in the Greek tradition. To exemplify my argument I would like to draw your attention to Avicenna’s great treatise, the “Kitab al-Shifa” (Book of Healing), which rivals in scope the Aristotelian corpus. As the title implies the work contains the knowledge needed to cure the soul of the disease of ignorance. It is all that is needed for man to understand. It is also as much as any man need know. Newton’s “Principia” has an obviously far different ring: it means foundation – essentially, a “beginning” – rather than a knowledge that is complete and sufficient for man’s intellectual needs as the titles of so many medieval Islamic texts imply. »»»

From the foregoing the reader will have received some idea of why Muslim science reached its limits after a prodigious start and why the West was able to take up the challenge and continue its further development. Yet, Hossein Nasr’s interesting analysis remains one-sided because it does not take account of the stifling interference of the religious authorities, especially in Spain that served as a rapprochement to the West. By the end of the 8th century the imam Malik ibn Anas († 795) founded a Sunni school of Sharia that became predominant in Spain and Morocco in its form called Malikism. It followed very strict rules. A distinguished French scholar on Andalusia, as Spain was called by the Muslims (and still is), writes about this period: “*The Muslim Andalusian state thus appears from its earliest origins as the defender and champion of a jealous orthodoxy, more and more ossified in a blind respect for a rigid doctrine, suspecting*

and condemning in advance the least effort of rational speculation.” ⁽³⁴⁾ This explains in part why the Greek sciences never had any real impact on Islamic society, while on the other hand Hellenisation took root on the European continent.

Christians suffered heavily under the Muslim rule

In spite of the rapprochement there was never an idyllic past of peaceful Christian-Jewish-Muslim coexistence in Spain. The myth of Islamic tolerance emerged in France during the 17th and 18th centuries and exerted an influence on political thinkers of the Enlightenment. In fact, there are no historical proofs of the Arabic tolerance in the Christian lands conquered by ‘jihad’ (holy war). There is ample proof that the caliphs used Christian notables and patriarchs to impose despotic rule over their overwhelmingly Christian populations, who had acquired a so-called dhimmi status, which put them in an inferior ‘spit-upon’ position. For this question see for instance Bat Ye’or’s book “Islam and Dhimmitude: Where Civilizations Collide”. I now quote from her book “Eurabia” - Ass. University Press, Cranbury, U.S.A. # 2005 (pp. 165-66): «« The humiliating status imposed on the dhimmis and the confiscation of their land provoked many revolts, punished by massacres, as in Toledo (761, 784-86, 797). After another Toledan revolt in 806, seven hundred inhabitants were executed. Insurrections erupted in Saragossa from 781 to 881, Cordova (805), Merida (805-13, 828 and the following years, and later in 868), and yet again in Toledo (811-19). The insurgents were crucified, as prescribed in the Qu’ran (5:37), a punishment still applied in the Sudan today. The revolt in Cordova of 818 was crushed by three days of massacres and pillage, with three hundred notables crucified and twenty thousand families expelled. »»

4.4 – Blind respect for a rigid doctrine

The oral tradition, presented in the ‘sira’ and ‘hadith’ and their interpretation (Ijtihad), progressively formed until around the year 1050. ‘Ijtihad’ indicates the freedom of doctrinal interpretation in matters of faith. In subsequent eras each effort to enlarge the interpretation, or to reinterpret certain aspects of it intelligently and cautiously, has always been vehemently persecuted, wherever the place and whatever the Islamic inclination or current of thought. (See the meticulously researched book on that matter: “The Closing of the Muslim Mind: How intellectual suicide created the modern Islamist crisis” by Robert R. Reilly - 2010) As the formative years of hadith occurred during Islam’s bellicose period, the Islam of the 21st century is stuck with this terrible and awful belligerence. This way of seeing things is ‘not’ an aberration but belongs to the mainstream of Islam, to the Umma. The Umma denotes the community of Muslims, that is, the totality of all Muslims, which has a much stronger impact in the mind of its members than the concept of nation and nationality. It would be naive to suggest that the conditions of a peaceful Islamic interpretation, which allows for the tolerant coexistence with other religions and cultures, have been met. ‘Dhimmitude’, which denotes the status of non-Muslim groups in very humiliating and oppressive terms, still constitutes the core of the Islamic practice as the experience in the predominantly Muslim countries in our world clearly and very sadly demonstrates.

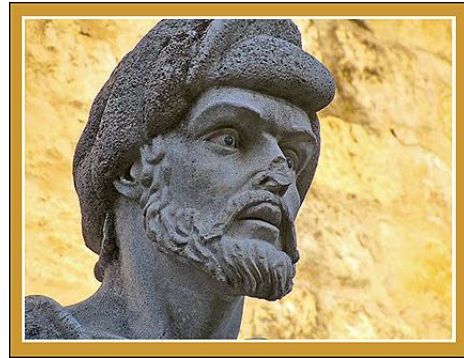
I would like to quote from an article by Dr. Ahmad Al-Baghdadi, a political science lecturer at Kuwait University, written in the Kuwaiti daily “Al-Siyassa” of July 20, 2005, that was translated under the direction of Aluma Dankowitz from the Middle East Media Research Institute (MEMRI):

«« In our miserable Arab world, the intellectual writes with one hand and carries his coffin with the other. He writes with only the wall behind him [to protect him], and his bank account is usually modest. In addition to all these worries, there are the terrorists, who threaten to murder him. (...) The terror against Dr. Al-Qimni and others reveals the intellectual bankruptcy of the religious groups, and the cultural bankruptcy of the Arab regimes and of the Arab peoples. By Allah, the West should not be condemned for thinking that every Muslim is a terrorist, when it sees all these shameful deeds and the Muslims remain as silent as the dead... »»

In the same article of Dankowitz ("Inquiry and Analysis Series - no. 254", Nov. 23, 2005), I found the following statement, taken from an article in the London Arabic daily "Al-Sharq Al-Awsat" of July 21, 2005, by Abd Al-Rahman Al-Rashed, the director of "Al-Arabiyya TV" :

«« Since the 1980s, and following the emergence of the extremists due to the success of the Islamic revolution in Iran, we in the Arab region have been living in a climate that silences authors. Most of the Arab extremists have made it a mission to persecute thinkers, authors, playwrights, and those working in the cinema. They recently added to this list the moderate imams and clerics, and are using the same method against them, namely overt and covert threats. (...) As long as the (Arab) society fails to express solidarity against the intimidation, the accusations of heresy and treason, and against the direct threats – many people like Sayyed Al-Qimni will announce their retirement. Those who rejoice to see an intellectual like Al-Qimni leave the arena are opening the (gates of) Hell for themselves. As we have seen, these threats do not spare any sector. They have reached the top echelons, and have even targeted senior clerics and leading Islamic thinkers, because beside every radical there is someone even more radical. »»

The petrified outlook of Islam explains why Averroes, who in his way was a great and intelligent thinker, was proscribed. For the distinction he made between faith and reason he was accused of heterodoxy by the Caliph he worked for. He was seized upon like a criminal. After some time in prison he was confined to his home and humiliated to such a degree that when rehabilitated he had no desire to live. He died a few months later. This is why no trace exists of Averroes' original Arab texts. It is through the Hebrew translations that his work has been preserved.



Ibn Rushd, known as Averroes

4.5 – A holy breath penetrated the human institutions

The development of the Greek science here in the West at first followed the lines of the Christian tradition as exemplified by people like Boethius. I should not forget to mention James of Venice, who stayed at the Abbey of Mount Saint-Michel in northern France, as a significant translator of Aristotle in the 12th century, whose many works were widely read right across Europe. Thus a pioneering front of European culture opened around the great abbey from the first half of the 12th century. As Sylvain Gouguenheim puts it: *"Europe put down certain roots here, doubtless more than on the banks of the Euphrates."* The translations of James were made more than a generation before a start was made on the translation of the Arab works into Latin, done at Toledo. James has been called the first systematic translator of Aristotle since Boethius (from Greek into Latin), which in the tradition of the time was interwoven with James' own commen-

taries. Boethius and James of Venice are two outstanding figures in the transmission of Greek culture to the West, but in the intervening 700 years things did not stand still.

I would like to stress that there has never been a hiatus in the transmission and consolidation of Greek thinking here in the West, though it can be properly stated that without the monasteries things would have been very different. They were the guardians of civilization. The monasteries were in effect beacons of light and learning. A point that the late Harvard professor Charles H. Haskings and other mediæval historians after him have made is the intellectual debt that Western Civilization owes to the nameless heroic monks and nuns for whom the copying and translation of books was a labour of love. Haskings writes in “The Renaissance of the Twelfth Century”, a classic work:

«« Set like islands in a sea of ignorance and barbarism, they had saved learning from extinction in Western Europe at a time when no other forces worked strongly toward that end. True they too were affected by the localism of the epoch, as well as by the human difficulties of maintaining the ascetic life, but they were kept in some sort of relation with one another by the influence of Rome, by the travels of the Irish monks, by the centralizing efforts of Charles the great, and by the Cluniac reforms of the 10th and 11th centuries, so that books and ideas often passed over long distances with a rapidity which surprises the modern student. We should not, however, assume that monasteries were everywhere and always centres of light and learning (...) In the rule of St. Benedict, which came to prevail generally throughout the West, the central point was the ‘opus Dei’, the daily chanting of the office in the choir, which consumed originally four to four and one-half hours and tended with its later developments to occupy six or seven.

(...) The monastic ‘scriptorium’ is an institution by itself. Though copying is not prescribed specifically in the earliest rules, it soon became recognized as a meritorious form of labor, and, so tells W. Wattenbach, “*every revival of monastic discipline was accompanied by renewed zeal in writing.*” The Abbot Peter the Venerable urges copying as superior to work in the fields. The Cistercians relieved their scribes from agricultural labor, save at harvest time, and permitted them access to the forbidden kitchen for the tasks necessary to their occupation. The Carthusians required copying from the monks in their several cells. Flagging zeal was stimulated by hope of eternal rewards: “*for every letter, line, and point, a sin is forgiven me*”, writes a monk of Arras in the 11th century; and Ordericus tells of an erring monk who gained salvation by copying, being finally saved from the Devil by a credit balance of a single letter over his many sins. »» (35)

These were not ignorant scribes only copying work from far away and a millennia before, but intelligent and resourceful scholars who bettered themselves and their times. The monasteries have always applied themselves to the preservation of Greek works, being aware of the Greek heritage of the Christian Church (the New Testament was written in Greek). The Popes were keen to enrich their libraries with this type of work – quite understandably, if we look at their background. For instance, in the period between 642 and 752 there was a steady stream of Popes who, in their younger years, had come from the East in the wake of a stream of fugitives fleeing the Muslim invasions – and they were versed in Greek. Over many centuries during the Middle Ages, Sicily and the southern part of Italy served as a rallying point between Byzantium and the West, as in those regions Greek was the common language used by clerics, merchants, ambassadors and, of course, monks.

«« Each advance on the part of the Arabs provoked an emigration, a flight of part of the elite. As for the peasants, they had no other choice than to remain where they were, abandoned by their political leaders (...) This movement (of emigration) is unfamiliar to historians because it occurred in the silence that accompanies the migrations of the

anonymous. Disorganised, struck by blows interrupted by times utterly quiet, unequal according to the places of origin, it extended across several centuries, shaking the Mediterranean region with a ‘Brownian movement’ of men and women. F. Burgarella is of the opinion that the migration was uninterrupted, illustrative of a mobility internal to the Byzantine Empire and almost always silent: “*quai sempre silente mobilita interna dell’Impero*”. Paradoxically Islam first gave the Greek culture to the West in provoking the exile of those who rejected its domination. But a flight of this kind would have had no consequences if the Greeks of Byzantium had not taken over the relay race of the ancient culture and if the western elites had shown no interest. The broadcasters met their receivers. From the Carolingian court to that of the 10th and 11th century German emperors there is no lack of individuals showing interest in the culture and knowledge of the Greeks.

The contacts between the Franks and the Byzantine world go back as far as Pepin the Short, who asked the Pope for Greek books between 758 and 763. In return, Paul I gave him a series of manuscripts, a list of which he included with his reply to the Frankish sovereign: liturgical books, manuals of grammar, of spelling, of geometry, works of Aristotle – including his Rhetorics – and of Pseudo-Dionysus. All of them – so the Pope specified – written in Greek (...) These books were meant for the education of Gisèle, the daughter (!) of Pepin and for the monastery of Saint-Denis, one of the main centres of the Carolingian culture, though at the time still in its infancy. The ages of the mediæval times qualified as ‘dark’ show an insatiable intellectual curiosity, an uninterrupted search after knowledge, with which we have to credit the mediæval Christians. Their search ended in a re-discovery of ancient works, in their introduction into mediæval thinking and in their assimilation. The whole contributed to the explosion of a new knowledge. »» (36)

Islam does ‘not’ mean peace or being at one with the Divine Will

Most Arabic words are based on a trilateral root system, such as k-t-b or s-l-m. The words formed from these roots often have a connection to one another (*kataba* is to write, *kitāb* is a book, *maktaba* is a library, and so on), but not always (*katiba* is a squadron of soldiers). In other words, primary roots have a core meaning, but they also point to seemingly related letter combinations that are not derived from them. In the case of s-l-m, *salām* means peace and *salāma* means safety. But this primary root also points to many combinations unconnected to it, such as *salam* (a variety of acacia), *sullam* (ladder), *sulāmā* (digital bone in the hand or foot), *sulaymāni* (mercury chloride), *aslama* (to betray), ...and *islām* (submission). As it is wrong to state that the acacia variety means peace, it is wrong to state that *islām* means peace. *Salām* and *islām* are two distinct words. In brief, Islam means total submission and nothing else. It does ‘not’ mean “being at one with the Divine Will” nor “a strong commitment to God”, though that might be concluded by implication. In poetic texts it is possible to play with these words, but that would be on the same level as a play on words with the English words “bad” and “bed”.

That Christian Europe followed its own path should hardly surprise us, as a deep-felt suspicion reigned against those infidels, as they used to call the Moors. Moreover, mediæval Europe had become thoroughly Christian. The continent became literally covered with monasteries, a movement that can be traced back to the year 909 when the monastery of Cluny in Burgundy was founded. This movement fanned out in the 12th century via important religious reforms that were initiated in a small region about 100 kilometres northeast of Paris. Think of the towns of Arrouaise, Laon and Prémontré. We should not forget to mention Cîteaux near Dijon, the Benedictine abbey founded in 1098, from which originated the famous abbey of Clairvaux –

founded, of course, by Bernard of Clairvaux in 1114 and 'la Trappe' in Normandy, founded in 1140 by the Sire de Rotrou. There were the great abbeys, the convents, the monastic sheds. In France, archæologists have discovered in the soil traces of monastic foundations every 25 kilometres! Europe was caught as in a net, in a web of prayer. Imagine the thousands of hands lifted up to the heavens, these monks and sisters who took care of the temporal cities, who interceded, who pleaded for the reign of God on earth. What an immense grace, what a profusion of lightning rods against the barbarities of society! We should also mention the many pilgrims who flocked out over Europe. This is what constitutes the greatness of the Middle Ages, which ultimately led to the monuments of intellectual wisdom, the 'opera omnia' (complete works) of the seraphic teacher, the Franciscan Bonaventure (1217-74), and the angelic teacher, the Dominican Thomas Aquinas (1224-74)!

Think about this movement towards sainthood, of those princesses who came to hide their titles, their beauty and their youth in these cloisters; of those knights who forsook the honours of the city on earth or the glory of weapons in order to embrace the cross of Jesus Christ. This reminds us of another world, the world of God. A holy breath penetrated the human institutions. This modelled mediæval society, which set the stage for our modern Western society, though nowadays in a spirit of apostasy it does not want to know of its ancient roots. It is the same old story. Throughout its eventful history, the Church of Christ had to confront all sorts of apostasies that were continuously reborn. Each accomplishment in terms of evangelisation, doctrine and institutions was followed by destruction after which the work had to start again on the ruins and vestiges of old. As the saying goes: *"In religion nothing fails like success."* And so it happened in 1182, twenty-nine years after the death of Bernard of Clairvaux, that a boy was born in a rich family, who was to become one of the great evangelists and reformers of the Church. You have rightly guessed: Francis of Assisi. In 1206 the living Christ tells him: *"Go, Francis, and repair my home that is falling in ruins!"* Twenty years later he dies, exhausted but satisfied. A similar story can be told about Dominic Guzman, born in 1170, founder of the Order of Preachers (Dominicans). By means of preaching he halted the advance in Southern France of the extremely noxious Cathar movement,⁽³⁷⁾ after all other endeavours by people of the Church to stop this pest had failed.

Notes

(32) Reference: “The Mediæval Mind - A History of the Development of Thought and Emotion in The Middle Ages – Vol. 1” by Henry Osborn Taylor - Macmillan & Co, London # 1925, 4th ed. (p. 286).

The significance of the decimal calculation system

(33) Decimal place value and the mathematical concept of zero were most likely discovered along the Indian Ganges valley during the reign of the Gupta that lasted from 240 to ± 535 AD. These were the high-days of Indian civilization, also known as the classic age. The first conclusive evidence of decimal place value appears in an Indian text that can be traced back to exactly 458 AD. Place value was also known in Babylonia (3rd dynasty of Ur), some 4,000 years earlier, and was used for whole numbers and fractions in a sexagesimal system (60 instead of 10), but that passed into disuse, though it was still used by the ancient Greeks. Peter Plichta says:

«« Without the invention of the decimal system, mathematics, natural science and technology would be unimaginable today. (...) The decimal system to which we owe so much is considered by mathematicians to be only one of the possible models. The real significance of this system as a framework for construction, as the basic methodology of the universe, is not even suspected. »» “God’s Secret Formula” by Peter Plichta - Element Publ. # 1997 (pp. 143-144).

In a paper dated 1887 and entitled “What are Numbers and What Do They Mean?”, the mathematician J.W. Dedekind defined numbers as a fabrication of the human mind. This has been the scientific attitude ever since. In this tradition Bertrand Russell once said: “*Physics is mathematical not because we know so much about the physical world, but because we know so little: it is only its mathematical properties that we can discover.*” In contrast I subscribe to the view that without the existence of numbers as ‘objects in reality’ – within the continua of both space and time – there could be no universe. I abstain from the question of what is the most relevant: the geometrical designs from which numbers and their connected physical laws derive their significance, or just the other way round. Therefore, if we talk about numbers and mathematics, it implicitly means geometry; if about geometry it implicitly means the numbers related to it. The one always follows from the other. The ancients Greek, however, failed to see the connection.

(34) The quote is from “Histoire de l’Espagne Musulmane” (History of Muslim Spain) by Evarest Lévy-Provençal - Maisonneuve, Paris # 1950 (Vol. I, p. 150).

(35) Reference: “The Renaissance of the Twelfth Century” by Charles Homer Haskins – Harvard University Press, Cambridge # 1927 (pp. 33-34, 72-73).

(36) Reference: “Aristote au Mont Saint-Michel” by Sylvain Gouguenheim – Éditions du Seuil, Paris # 2008 (pp. 33-35, 53 and note 26 on p. 33). The Brownian movement is a description of the random movement of a ‘large’ particle immersed in a fluid that is submitted to no other interaction than shocks with the ‘small’ molecules in the surrounding fluid. The result is a very irregular type of movement on the part of the large particle.

The Cathars, a pernicious crowd!

(37) The Cathars or the ‘pure’ had an outrageously pessimistic view of creation, regarded as the work of Satan. Hence, it was useless to continue the existence of the human race. They abhorred marriage; oath-taking was forbidden because that would only consolidate society which had to be destroyed. Labour was advised against and suicide glorified. The Roman Catholic Church had to be fought by all means and so it happened that priests were regularly murdered.



The Ascent of Man and Science *in confrontation with the* *Mysterium Coniunctionis*

***Introductory note:** Having assimilated the Greek thinking, the next step was to put it into practical use. Yet it remained foremost a philosophical venture. Philosophy in those days meant theology. It was only a small elite, versed in reading and writing, that applied themselves to the philosophy of science. That also explains why things evolved so slowly. Another reason why things went gradually was that how to do science was not yet clear. At the dawn of science people were painfully groping through a fog of misconceptions.*

‘The struggle with the influx of Greek thinking in the pre-Renaissance’ (5) (11th until 17th century)

5.1 – The problem of subjective and objective knowledge

After the introduction of the Islamic sciences to the West by Gerbert of Reims at the turn of the millennium, a discussion was ignited as to which approach was preferable: the cool analytical approach of Plato or the more intuitive approach of Aristotle. This is exemplified by the saying of Ghazzali (1058-1111), who was one of the great Arab philosophers: ⁽³⁸⁾ *“The highest seekers of knowledge are those who combine subjective and objective knowledge.”* There is the historically weighty conflict between Bernard of Clairvaux and Peter Abélard (1079-1142), whose work “Sic et Non” can be seen as a predecessor to the “Summæ” of the scholastics. In 1141, a year before his death, his works were condemned at the Council of Sens thanks to the intervention of Bernard. Regarding this affair, Professor Walter Nigg says the following in “Das Buch der Ketzer” (p. 208) (the book of heretics):

«« The new problems raised by Abélard can no longer be dismissed with a single command from on high. What Bernard did is no longer possible. It is rather a matter of Bernard and Abélard representing different ways of thinking: the Parisian magister had an approach based on reason while the Abbot of Clairvaux thought more in symbolic terms. The two approaches do not overlap in any way at all, and yet we should not regard them as irreconcilable counter-positions, since that would lead to a fatal destruction of the spiritual life. It is a question of seeing their mutual relationship not as one of contradiction but as one of a difference-in-ranking-order. »»

The teacher Thierry of Chartres († after 1156) made an effort to scientifically explain the six days of creation from the Genesis account, based on Platonic premises. His point of departure was that God, like a blind watchmaker, ⁽³⁹⁾ went to rest after His initial deed of creation. All that followed was simply a result of the first cause in a train of events, a view also maintained by Einstein. ⁽⁴⁰⁾ In this way, even Adam and Eve would have been created without any divine

intervention. William of Conches († after 1154), who also taught in Chartres, entertained the same ideas. He was to become the tutor of the future king of England.

Dante Alighieri – an appraisal

Don Miguel Asín-Palacios, a Spanish orientalist and Roman Catholic priest, is known for his publication in 1919 of “La Escatología musulmana en la Divina Comedia” (Muslim Eschatology in the Divine Comedy), in which he proves the Muslim sources for the ideas and motifs present in Dante’s “Divina Comedia”, in such a way and so often that Dante can be accused of outright plagiarism. Specifically, Asín compares Dante’s Comedia to the literature of Muslim writers like Ibn Arabi and Abulala with their typical Muslim mysticism and Gnostic connotations. Even Beatrice, the sensual Beatrice, the idealised woman whom Dante meets at the gate of heaven, is a figure that better belongs in Arabic mysticism than within the Christian tradition. Asín also conjectures how Dante could have known directly of the Muslim literature in translation. Dante’s hatred for the Roman Catholic church is all but veiled. In his Purgatory (XXXII) he calls the Church the “*putana scielle*” or proverbial whore, who should be killed. In his essay about “Dante and Medieval Culture” Bruno Nardi convincingly shows the neo-Platonic leanings of Dante, as well as a form of Averroism and a liking for the Arab traditions. Dante is perhaps the first one who tried to break the mediæval unity of Christian faith and public life, however imperfect in its bond but nonetheless real. He is the first apostle of the modern secular State, that bans all mention of God or Christian faith, chasing the Cross from all public life. As long ago as 1329 Pope John XXII condemned Dante’s “De Monarchia” where we find those fatal ideas. Little wonder that Dante has become so much applauded in our times. He became the ‘enfant chéri’ of the intellectual class. The first one to idolise Dante was William Blake (as from 1790), followed in the subsequent century by a flood of uncritical praise from all quarters in Europe.

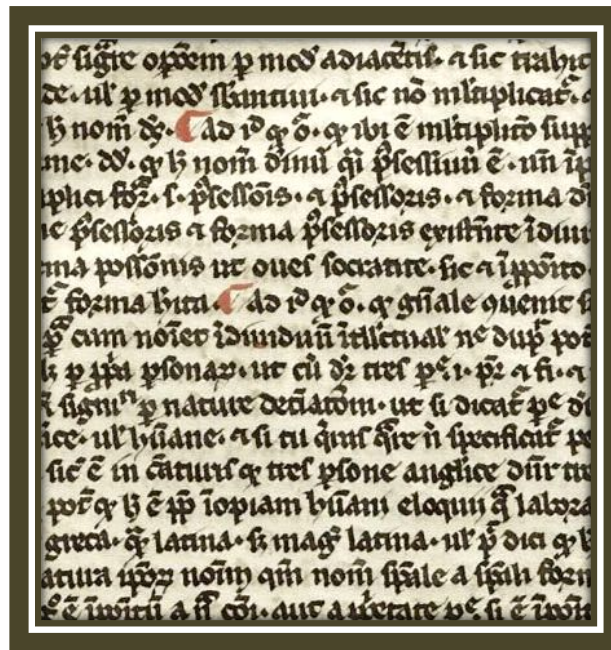
What kind of man was Blake? I mean, what were his thoughts? One of Blake’s strongest objections to Christianity is that he felt that the institution encouraged the suppression of natural desires and discouraged earthly joy. In the Proverbs of Hell he wrote: “*As the caterpillar chooses the fairest leaves to lay her eggs on, so the priest lays his curse on the fairest joys.*” Blake propagated the idea that because of their denial of earthly joy, men are actually worshipping Satan. He saw the concept of ‘sin’ as a trap to bind men’s desires (the briars of the Garden of Love), and believed that restraint in obedience to a moral code imposed from the outside was against the spirit of life. To him the only heavenly virtue was found in cultivating understanding (Vision of the Last Judgement). He did not hold with the doctrine of God as a Lord, an entity separate from and superior to mankind. This is very much in line with his belief in liberty and equality in society and between the sexes. Well here it is, the credo of man-the-lonely of the twentieth century!

5.2 – The Church did not fail to provide an answer

It was clear that a response of the Church was called for, especially because the number of translations from Greek authors, via the Arab bridge, had become overwhelming. And the Church did not fail to provide such a response. Because of the sheer quantity of works that arrived in the West, the task of weeding out all the possible errors detrimental to the true faith proved to be a dead end. In terms of literature the works ascribed to Aristotle have been called a moloch. This shows the nature of the problem. Moreover, if we read the Muslim works of Aristotle, it appears that they managed to make a version of Aristotle from the Platonic perspective. This way of seeing things is also encountered in some Western men of science like the great Franciscan Robert Grosseteste (Greathead) of Oxford (1168-1253). Avicenna (Ibn Sina, 980-1037) ventured

in that direction. As from 1230 the comments of Avicenna are superseded by Averroës, whose works were condemned by Pope Leo X (1513-21); those of Avicenna indirectly by Gregory IX (1227-41).

In 1277 the bishop of Paris, Étienne Tempier, called an assembly of scholars with a view to attack Aristotelianism. I would like to point out that even in case of the uncontaminated Aristotle, his teachings contain a number of elements contrary to the Christian faith. He stated, for instance, that creation has no beginning and no end, ⁽⁴¹⁾ and his god, the first mover, is without change and therefore incapable of interference with the material reality. Additionally, in the way Aristotle's ideas have reached us, the soul has no independent existence beyond the physical realm. This is just to show the complexity of the problem, for it is certain that both Aristotle and Plato have given valuable and disciplined approaches for the advancement of science. But, as Bonaventure stressed, reason, and by extension the scientific routine, will in itself never be able to fully ascertain the truth if not supported by means of divine enlightenment. He therefore and rightly concluded that speculative thinking, then called natural philosophy, should be the servant of divine revelation.



part of a writing by Bonaventure

The scientific problems that confronted his age have found an original and brilliant answer in the writings of St. Bonaventure, who took up the theme of the orientedness of being. He taught that all of created reality is somehow contained in Christ, 'the hidden centre' of the universe. Christ, of course, is the primal expression of God and in its very being points back to Him. Following Francis of Assisi, Bonaventure's universe is symbolic: *"Every creature, because it speaks God, is a divine word."* Like a stained-glass window, creation is translucent; its significance can be read only because of the divine light that permeates it, making it reflect a source beyond itself. This Dominic Monti calls the basis of Bonaventure's strong reaction to the radical Aristotelianism that was increasingly in vogue; for him, all things are theonomous in their very being. Religion is a system that is transmitted by signs and symbols. By contrast, philosophy and its nephew science claim to represent the unblemished truth stripped of all redundancy. Unblemished perhaps, but not the whole truth. We also need symbolism, for it gives due value

to the interrelatedness or wholeness. A functional whole is defined by the pattern of relations between its parts, not by the sum of its parts. Its totality (called the ‘emergent property’) is as essential to an explanation of its elements as its elements are to an explanation of the whole. To this Bonaventure adds the following: “*Nothing created can really be autonomous as if a thing could somehow be considered in itself*”; and he continues: “*Nothing makes sense apart from God.*” ⁽⁴²⁾ The divine revelation as point of departure means first and foremost, as concerns the scientific practice, that each manifestation of the multi-faceted universe has a divine purpose, to be understood as the goal-orientedness of the appearances. Would God act devoid of worth or significance? It is up to us to discover that purpose and to act like good custodians in obedience to that purpose, that certainly is to be found, for God will not fail to guide the humble and earnest effort. St Augustine states: “*Noli foras ire, in te ipsum redi. In interiore homine habitat veritas*” (Do not venture outside but turn into yourself. In the inner space of man lives truth.)

5.3 – *The god of the philosophers and scientists*

The principal object of attention for an appraisal of the scientific practice is the ‘hypothetical figure’, which concept is derived from the Platonic ideal. In the thirteenth century the importance of this figure was not so evident. In our twentieth century, where the devastation caused by the moral insensitivity of the scientific way of thinking is painfully present in many fields of activity, it is easier to see the significance of the ‘hypothetical figure’. Why is it so important? Because this figure as a mathematical image has no goal but merely possesses the elemental features of a thought construct. No more and no less. Its tool of development is verification by means of a strict discipline with mathematical underpinnings, whose tool is not only limited to the exact sciences. In the twentieth century this mode of thinking has permeated all the important sectors of human activity. Says Frank de Graaff in “Anno Domini 1000 - Anno Domini 2000” (1977): “*The mystical view of mathematics, expressed by men like Spinoza, is that they correspond to the most profound thought of the godhead.*” What a strange God. It makes you shiver! And also: “*Who is this god who gives the theorem instead of the symbol, who makes objects instead of creatures? Even Pascal himself knew him. He names him in his Mémorial ‘le dieu des philosophes et des savants’, the god of the philosophers and scientists.*”

Scientific thinking ‘reduces’ in tautological sequence the axiomatic ideas to the verisimilitude of mathematical precision, and even worse and as may seem fit, it transposes the result of a precise mathematical elaboration back again to the independent world of the idea perceived as the ultimate representation of reality, which of course it is not. As a construction of the mind it is an approximation of reality and sometimes a very good one. However, the fact remains that if the process of reduction is applied to its extreme, it denies reality in favour of mathematics, it denies intuition in favour of logic and sensitivity in favour of the intellect, whereas each of these qualities deserves a place in its own right. Establishing the rules of nature by which we are able to manipulate – and manipulate we do – is not the same as explaining and knowing. By the false pretence of our all-knowledge and all-might we subdued and maltreated our environment and have torn out its soul. The well-known Dutch poet, H. Marsman (†1940). put this superbly in his collection of poems entitled “Tempel en Kruis” (Temple and Cross):

*– I who slept by stars and wore the hair of space
like silver antlers, and blew the pollen of the planets
over the milky way and, seated in the moon,
sailed along the groundless blue of summer nights,
I am robbed and empty, my boats are burned,*

*my voice has lost its sheen and finds no more resonance
in the dead firmament, nothing more than an echo
from the sombre vault of my desperate heart.*

*– I stand alone, no God or society
to involve my existence in a living relationship,
no horizon or sea, no poor grain of sand
in the nameless ups and downs of the burning desert.*

5.4 – The fight of Thomas Aquinas against the Averroistic teachings

Concurrently with Bonaventure, Thomas Aquinas made an important contribution, difficult to overestimate, geared to the philosophical problems that were brought about by the influx of Greek thinking. Thomas seems to have existed for this one purpose: to defend Christianity as a coherent faith against the impulses that emanated from the Arab (Koranic) wisdom. In this undertaking he never lost sight of Averroës (who had died before Thomas was born), that arch-enemy of Christian teaching.⁽⁴³⁾ The writings of this Arab philosopher were the major cause of perversion of the teachings at the University of Paris. The wise Thomas called him the “*perverted and peripatetic philosopher*”. The vehicle of the Averroistic corruption were his three “Commentaries” on Aristotle. Although not authoritative for the essential of Aristotle’s works, they were, however, of great influence in determining the general perception of Aristotle. Averroës was an elitist who advocated the principle of twofold truth, maintaining that religion has one sphere and philosophy another – that sounds familiar! The truly enlightened would apprehend the truth of a situation and therefore, in his eyes, natural philosophy supersedes religion - which nowadays is a Modernistic pet notion. In him we already find the exaltation of the powers of the mind as the unique means for the secular ascent of Man. Thomas’ devotion to the sacred task of weeding out the heresies from Christian thinking was so great that when he was offered the Archbishopric of Naples he begged the Pope with tears to be excused. If he had to accept the appointment he knew his priority would be compromised and his abiding passion would remain unfulfilled: the “*Summa Theologiae*” would not have been written.

In his writings he managed to reconcile the realities of the secular world and the demands of the Gospel. His philosophy is truly a philosophy of being and not just that of appearances. He conversed much on the vital relation between reason, faith and revelation, the latter considered by him to be a form of reason. Thomas underlined the harmony that exists between the light of reason and the light of faith, for both find their source in God and in their application they cannot contradict each other. Even more important is his consideration that the careful observation and interpretation of the things of this world, which is the object of science, is beneficial to a better understanding of the divine revelation. Faith, he said, does not fear the intellect but looks for it and trusts it. In no way was Thomas against the advancement of science, which is the product of the reasonable faculties of man. He actually conceived faith as a dialectic exercise of the mind of which his own work gives ample proof. St Anselm of Canterbury, who lived in the 11th century, had already spoken in that sense, the same Anselm whom Pope John Paul II called “*one of the most spiritual and most important creative personalities in the history of humankind*”.⁽⁴⁴⁾ And what about St Augustine (4th century), who was the first to make an impressive synthesis of philosophical and theological thinking? Certainly the Church, by her great thinkers, led the way to the integration of faith and science. However, the Church was not heeded.

5.5 – *The seditious faction*

The growing group of people who belonged to the seditious faction of the Paris teacher Siger of Brabant were enticed by the Averroistic ideas, though not slavishly. Their creed is termed Latin Averroism. Aquinas tried to put matters straight in his “De Unitate Intellectus”, written by him in response to Averroës’ in essence pantheistic philosophy. The central issue at stake, then, was mono-psychism, which had dangerous implications for the concept of the immortality of the soul. Its starting point was the notion that the intellectual human soul lives a separate as well as a collective existence for the whole of humanity, unique and eternal in its kind, that in some way is acting to complete a human body without, however, affecting the body in its very substance. Additionally, it entailed the belief that matter has always had an eternal existence. Creation out of nothing, that is to say ‘creation out of God’ was considered an absurdity. In reaction to Aquinas’ refutation and to the condemnation in 1270 by the bishop of Paris, Siger progressively conformed to the official doctrine. More insidious were his ideas on the nature of philosophy. While he avowed its uncertain or probabilistic nature, he conveniently agreed to the superiority of the divine revelation. He claimed that philosophical speculations should be allowed to develop without any interference from the religious sphere because in his view – and I partly agree – both are irreconcilable. In that sense the natural philosopher (scientist) would have the right to deny creation and God’s power or His right of intervention. Here, I fully disagree as it is pure heresy. In his narrow-minded classification supernatural events fall outside natural philosophical considerations (the realm of science). Siger was unstoppable and asserted that natural philosophy had proven a number of theological points to be wrong. Put bluntly: faith had been kicked out of the door by natural philosophy, and this remained so for science as it has come to be in our times.⁽⁴⁵⁾ His way of formulating the relation between reason and faith was then cause for a public outrage, which brought him a further condemnation in 1276 and a third and very detailed one in 1277, which not only attacked Siger but also a number of essential foundations of Aristotelian philosophy that, for instance, treated the possibility of empty space as an absurdity as well as the possible existence of multiple universes, which view would later impede the advancement of science. There were many rumours about Siger’s alleged process and imprisonment, but they were just rumors. We only know that a few years later he was killed by some lunatic while fleeing in Italy. Dante, the rascal, mentions him in his ‘Divina commedia’ as one of the twelve wise men in paradise, which was symbolic for the autonomy of the natural philosophy in opposition to science proper that finds its roots in faith. It was symbolic also, though Dante could not have had that in mind, of the science which in later ages bowed deeply before the god of reason. Pierre Duhem, who wrote in the beginning of the 20th century, considered the conviction of 1277 as the birth certificate of our modern science, which in certain respects is true.⁽⁴⁶⁾

5.6 – *The Sleepwalkers*

Several important theories by renowned scientists regarding the contribution of practices in the Middle Ages to the later revolution in science during and immediately after the Renaissance have seen the light of day in the twentieth century. Was it a continuity or rather a drastic mutation, previously unheard of, in methodological practice and conceptual thinking? And how exactly did it happen? These questions are far from resolved and may never be. It is probably a conjunction of several developments, difficult to define because they were not the outcome of a conscious effort by some particular person. It was more a question of trial and error, as Arthur Koestler tries to demonstrate in “The Sleepwalkers”, on the front cover of which is the following remark:

«« He breaks down the myth of the rational, logical, advance of science. As the basis of his study he takes the lives, personalities, and methods of thought of those who led

the way towards the Newtonian universe – Copernicus, Kepler, Brahe, and Galileo. Seen in the round against the background of their times, they no longer appear as infallible machines, but as men groping painfully through a fog of misconceptions – the Sleepwalkers. »»

And so it happened in the 16th and 17th centuries that in different scientific disciplines ⁽⁴⁷⁾ a ripening of thinking and more or less similar methods of experimentation, fact-gathering and mathematical analysis emerged that were geared to the requirements of each discipline. To illustrate my point, I quote from the foreword by Alex Hurst (1998) in a book of beautiful reproductions of ‘the tall ship in art’, also the title of the book. In a gallery of more than one hundred paintings, it offers some of the finest work of five of Britain’s foremost marine artists, all acknowledged masters of the tall sailing ship genre. He writes:

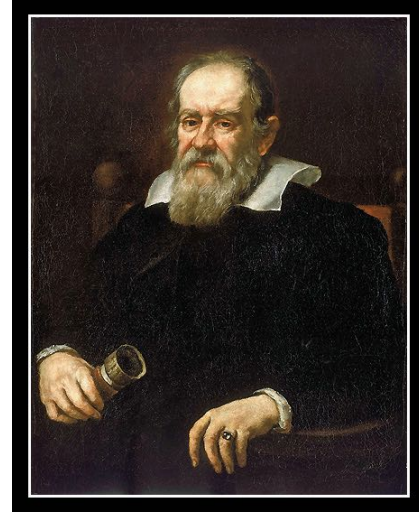
«« It was only in the early nineteenth century that marine painters suddenly broke away from the convention of painting stiff seas, apparently made of solid putty, to achieve their flow and the reality of their sense of wetness and movement. Who was the first to do so, we shall never know, but until recently it was a mystery to me how the new style of ‘realistic and wet’ seas became adopted and practised by so many artists in different parts of the world in such a relatively short time – Ivan Aivazovsky in and around the Black Sea; Somerscales in Valparaiso, the Melbye brothers in Denmark and by so many others, although unconnected and in disparate parts of the world. It was as if all were actuated by a common morphic resonance as, indeed, they probably were, though this hypothesis was still unknown. Now the evidence is overwhelming. Much later in 1921, when birds first discovered the advantage of pecking through the tops of milk bottles, the practice immediately spread across Europe, mainly among tits, although their territories seldom exceed some 12-14 miles, and it became ingrained what used to be termed their ‘instinct’ since, after some years of war with virtually no milk bottles and a new generation of tits, the practice immediately started again on their reappearance. There are innumerable similar examples. So it must have been that marine art was suddenly transformed by wet and flowing seas, taking the place of furrows, as it formed by gigantic ploughshares across lifeless oceans. The artists in this book are splendid exponents of this classic leap forwards. »»

I would like to add that this leap forward would never have happened if in the first place many artists had not been trying to paint realistic seas, with results they ought to have recognised as being far from realistic. In the same way, many inquisitive minds were trying to practice science on the eve of the Renaissance and, like the marine painters, they must have been dissatisfied with the results, though these were not wholly unsatisfactory. Unexpectedly, the mass of effort and time came into play, which – if you allow the metaphor of the Sleeping Beauty – brought about the awakening of the dormant knowledge on how to practice true science.

5.7 – A weighty conflict

The Arabs, by contrast, were satisfied with their knowledge. Characteristic of their attitude was the statement by Averroës written in about 1180 and quoted by Pierre Duhem: “*Aristotle founded and completed logic, physics and metaphysics (...) because none of those who have followed him up to our time, that is to say, for four hundred years, have been able to add anything to his writings or to detect therein an error of any importance.*” This Arab approach was taken over by a number of Western scholars, which effectively hampered the advancement of science.

It has long been understood that this set of mind was at the root of the conflict between the Church and Galileo Galilei, who supported the Copernican system that was presented to the world in 1530 in the book called “On the Revolutions of the Celestial Spheres”; it states, as a fact, so it seems, that the earth rotates daily about its own axis and annually about the sun. Galileo was forced to retract his stance in 1633 because of ecclesiastical pressure. He is reputed to have muttered upon leaving the court: “*Eppur si muove*” (yet it does move).⁽⁴⁸⁾ He was placed under house arrest in his villa in Arcetri for the remainder of his life. While under house arrest, he was not hindered in his work, since he published his greatest work of science in 1638: “The Discourse on the Two New Sciences”. It was only in 1993 that the Roman Catholic Church formally recognized the validity of his scientific work.



Galileo Galilei by Justus Sustermans

Michael White writes in the introduction to his book on Galileo, published in 2007:

«« (that) ...for all we know about Galileo’s conflict with the Church, this may have been nothing but a smokescreen. According to orthodox history, Galileo was put on trial (...) because he disobeyed a ruling which stipulated that he should only discuss, teach or write about Copernicanism as a hypothesis. He then wrote a book called “Dialogue Concerning the Two Chief World Systems”, in which he espoused the Copernican model ‘as fact’ (implicating that the biblical concept of the universe, as understood then, was wrong). But recent evidence shows that Galileo had actually stumbled upon a far more dangerous (idea), one that (...) would have threatened doctrine during a time in which the men who ran the Church were feeling particularly vulnerable. Galileo had written about it in some detail in a book called “The Assayer”, which was published in October 1623. The new concept it contained had such potential to damage that when the extent of the danger was realised by Pope Urban and his cardinals, they quickly concluded that no hint of the idea should be allowed to go beyond the Vatican. »»

In his book Michael White, an avowed Freemason, discusses the matter at hand, and after having reviewed the formulation of the release of the findings of the Galileo Commission, he concludes (p. 252):

«« (...) Galileo struck a deal with the Vatican authorities to say nothing more about his model for the structure of matter and to allow the entire focus of the trial and his persecution to rest on the question of Copernicanism. This fact was only revealed by historians, searching through the archives, who unearthed the documents G3 (in 1982) and EE291 (in 1999). In all likelihood no one in the Vatican of the 1980s was even aware of the true story behind the persecution of Galileo Galilei.

(...) In 1633 a Jesuit, Melchior Inchofer, stumbled upon the document later known as G3 and wrote his report EE291, discovered in 1982 and 1999. Some three-and-a-half centuries later, the papal commission (on finding the G3 document) brought to light the real foundation of the dispute between the most important scientist of the early 17th century and the Roman Church. »»

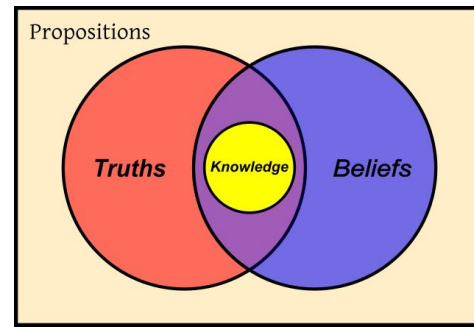
Galileo’s real crime would have been that the atomic theory, described in “The Assayer”, was threatening the orthodox view of the Eucharist. That the trial and conviction of Galileo for defen-

ding and discussing Copernicanism were a cover-up to shield Galileo from the more deadly charge of undermining the doctrine of the Eucharist is far from proven. Galileo was a devout man whose daughter entered into a convent at the age of 16 and she remained a nun for the rest of her life and kept good relations with him. It also goes contrary to all other existing evidence. This theory, actually Pietro Redondi's theory, is based on an unsigned and undated document and is too meagre to allow for valid conclusions.

As concerns the Biblical concept of the universe, as understood then, the official position of the Church was not as rigid as understood by later commentators. At the time, Cardinal Robert Bellarmine considered Galileo's model made "*excellent good sense*" on the ground of mathematical simplicity, that is, as a hypothesis. He remarked:

«« If there were a real proof that the Sun is in the center of the universe, that the Earth is in the third sphere, and that the Sun does not go round the Earth but the Earth round the Sun, then we should have to proceed with great circumspection in explaining passages of Scripture which seem to teach the contrary, and we should rather have to say that we did not understand them than declare an opinion false which has been proved to be true. But I do not think there is any such proof since none has been shown to me. »» ⁽⁴⁹⁾

We should know that no one had proof for the motion of the earth in 1632. It was still a hypothesis, but Galileo had the right inclination as much later evidence would show. It reverts to a strange paradox: Galileo's errors turned out to be scientific-methodological (his argument being based on the fallacious argument of the tides) and those of the inquisitors were theological-scriptural, following the then general lines of thought, which referred to the Battle of Gibeon when God made the sun and the moon stand still, as told in the Biblical account of Joshua 10. But actually it was the visual effect of a tilting of the earth axis. Many leading thinkers of the day believed that the Bible here taught that the earth is stationary. Take for instance the great astronomer Tycho Brahe, himself a Lutheran, who thought that way.



Euler diagram representing the epistemological definition of knowledge: what is knowledge, how is knowledge acquired and to what extent is it possible for a given subject or entity to be known?

The Enlightenment fabricated the myth that Galileo's trial illustrates the conflict between scientific progress and the Bible and for that matter the Roman Catholic Church. God is superrational, that is to say 100% rational. So, it is only 'the interpretation' of his Word, the Bible, that was put on trial. If science proves that a theological deduction is wrong, it only proves that the deduction was wrong and not a Biblical truth, because the Bible 'Is the Truth'. There is always a clear harmony between science and religion, but as Pope John Paul II eloquently affirmed: "*The pastor ought to show a genuine boldness, avoiding the double trap of a hesitant attitude and of hasty judgment, both of which can cause considerable harm.*" ⁽⁵⁰⁾ In sum, one should always be careful for too hasty conclusions and discourage precipitate judgment.

Maurice Finocchiaro remarks in his book on Galileo ⁽⁵¹⁾ that the key problem was the role of Scripture in physical science, the nature of scriptural interpretation, and its relationship to scientific investigation. The Pope's memorable judgment during the "Complexity Conference" of 1992 was that "*Galileo, a sincere believer, showed himself to be more perceptive in this regard*

than the theologians who opposed him.”⁽⁵²⁾ However, the lesson from this aspect of the episode had nothing to do with a conflict between science and religion but rather involved the epistemology of interdisciplinary interaction. Said Finocchiaro: “*The birth of a new way of approaching the study of natural phenomena demands a clarification on the part of all disciplines of knowledge.*”⁽⁵³⁾

Notes

(38) Abu Hamid Muhammad al-Ghazzali deeply influenced the direction of Islamic thought. His larger concepts were incorporated into scholasticism thanks to the work of the Dominican Thomas de Vio Cajetan (1469-1534), held in high regard by Roman Catholics and Reformers alike for his scrupulous exegesis of Holy Scripture.

(39) ‘Blind watchmaker’ is a term invented by author Richard Dawkins, currently in vogue, who wrote a book in 1986 with that title, subtitled: “*Why the evidence of evolution reveals a universe without design*”. Which is an idea that was borrowed from the 12th-century teacher Thierry of Chartres. Perhaps he had borrowed it from someone else.

Einstein did not believe in God

(40) Based on some of Einstein’s correspondence, the Nobel prize laureate Ilya Prigogine concludes in “From being to becoming” (p. 210): “*Einstein believed in the god of Spinoza, a god identified with nature, a god of supreme rationality. In this conception there is no place for free creation, contingency, for human freedom. Any contingency, any randomness that seems to exist is only apparent. If we think that our actions are free, this is only because we are ignorant of their true causes (their origin).*” He explains that his god knows no finality. The Muslims, on the other hand, firmly believe in the Creatio Continuo. In this, a miracle is to God just a departure from habit. Ghazzali’s chief argument was that physical causes are not true causes, but only occasions for God’s direct intervention, which comes close to the teleological argument of the goal-orientedness of the appearances. (see also “Einstein on Faith”)

(41) The infinity of moments is easier to imagine forwards. In the mathematical sense, however, it is also possible to imagine along an exponential curve an unlimited number of moments in time backwards (subsequent moments have a discreet distance defined as the Planck time). Those moments backwards, if according to such a curve, carry an unlimited number of universa which tend towards a certain mathematical limit. However, this would not mean that there is no start of creation and that God would not be in a position to cease it.

We cannot arrive at the truth based upon our own effort

(42) Creation is the result of a divine thought process. Because alternative thought processes are imaginable and the perfection of God is unimaginable (cf. St Anselm: quiddam maius quam cogitari possit); ...because of that, the things created have to be considered on the basis of the intention of the Maker in order to arrive at the true and ethical vision, which the philosophers of antiquity called the ‘orthos logis’ or ‘recta ratio’.

(43) “De Unitate Intellectus” was written by Thomas Aquinas to refute the fundamental pantheistic theory of Averroës. In his other works Thomas refutes the errors of Averroës on almost every page. He mentions him more than 500 times.

(44) This is to be found in the encyclical of Pope John Paul II: “Fides et Ratio”, p. 16.

Nowadays most scientists do not believe in God

(45) The Scientific American of Sept. 1999 reported a survey (based on the 1933 Leuba set-up) among the 1800 members of the prestigious National Academy of Sciences, which showed that

90% of the respondents did not believe in a personal God and in an afterlife. The article quotes Rodney Stark, an early social researcher on the spread of secularisation in a religious society:

«« *“There’s been two hundred years of marketing that if you want to be a scientific person you’ve got to keep your mind free of the fetters of religion.”* He argued that although demographics make a difference – a professor teaching in South Dakota is likely to be more religious than an academic in Chicago – higher education on the whole winnows out the idea of God or people who hold to it. In research universities, *“the religious people keep their mouths shut”*, Stark says. *“And the irreligious people discriminate. There’s a reward system to being irreligious in the upper echelons.”* Stark suggested that perhaps more NAS members are religious than think it politic to admit. »»

It would have been interesting if the survey had asked a follow-up question to those respondents who believed in a personal God: whether their belief had any relevance to the work they were doing in science. Probably the greater majority would have answered no. Professor Edgar H. Andrews would be a noticable exception. The same article in the Scientific American states that in 1981 the NAS issued a policy statement on the question of ‘creation science’ in public school biology classes. *“Religion and science are separate and mutually exclusive realms of human thought whose presentation in the same context leads to misunderstanding of both scientific theory and religious belief”*, it said. My answer is that they do not see the relevance because they have closed their eyes to it or are not trained to think along those lines. Richard Dawkins, who has likened belief in God to belief in fairy tales, sums up the dilemma quite pointedly by stating that he considers it intellectually dishonest to live with contradictions such as doing science during the week and attending church on Sunday. (see art. Sc. Am.) I do agree with him as concerns the dishonesty, but from the point of view that religion and science should be integrated.

Duhem was a believing scientist

(46) Pierre Duhem (1861-1916) was professor of mathematical physics and crystallography in Lille, France. The quote is from his “Essays in History and Philosophy of Science”. In his opening lectures for his courses in Lille he states: *“The consequences that analysis permits the physicist to logically deduce from these propositions have no ‘natural’ connection with the laws that form the proper object of his studies. But they provide him with an image. This image is more or less representative. But when the theory is good, this image suffices to replace the understanding of experimental law in applications the physicist wishes to make.”* Duhem was a believing scientist, but no Ultramontanist who exalted the papacy, but more of a Pascalist who argued for both logic and intuition as indispensable in approaching the truth.

(47) Education in the Middle Ages was based on the Quadrivium (geometry, arithmetic, astronomy and music) and the Trivium (grammar, rhetoric, dialectics). Medicine was not part of the normal curriculum.

The timeline of the process against Galileo

(48) Robert Cardinal Bellarmine, himself an accomplished Jesuit scientist, informed Galileo on March 6, 1616, of the Congregation’s decision to prohibit the Copernican or heliocentric system. It is generally agreed that the Cardinal told Galileo that he could discuss the Copernican system as a scientific hypothesis, offering astronomical and physical arguments for and against it, but that he must not advocate the theory. Maffeo Barberini, who was well acquainted with the work of Galileo, mounted the papal throne on August 6, 1623, as Urban VIII. He invited Galileo to visit him, and the two talked together as they walked in the papal gardens. Urban encouraged Galileo to write a new book on the heliocentric system in line with the decision of 1616. Galileo had thus to be careful not to advocate the new theory, only to offer arguments for and against it. For the next seven or eight years Galileo wrote the famous “Dialogue on the Two Great World Systems” being published in 1632. The censor of Florence, where Galileo lived, approved the book, but it was condemned by other clerics. Some thought that Galileo was not advocating the Copernican system, while others thought that the book clearly did. In essence, the question at the trial of 1633 was whether Galileo had disobeyed the injunction of 1616. Galileo maintained at his trial

that he did not advocate the theory in the “Dialogue”. Yet the official readers of the book concluded differently. In the end, Galileo was found guilty for disobeying the order of 1616.

(49) “The Sleepwalkers – A history of man’s changing vision of the Universe” by Arthur Koestler – Hutchinson of London # 1959 (pp. 447-48).

(50) The Pope’s Complexity Conference Speech # 1992 (7:2).

(51) “Galileo Galilei: Toward a Resolution of 350 Years of Debate, 1633-1983”, edited by Paul Cardinal Poupard, and epilogue by Pope John Paul II - Duquesne Univ. Press # 1987 (p. 355).

(52) The Pope’s Complexity Conference Speech # 1992 (5:4, 6:1).

(53) “Retrying Galileo, 1633-1992” by Maurice A. Finocchiaro - University of California Press # 2005 (p. 355).



The Ascent of Man and Science *in confrontation with the* *Mysterium Coniunctionis*

***Introductory note:** Having established that the philosophers were painfully groping through a mist of misconceptions in their quest to find the manner of doing science, we have now come to the point that ungodly men forced their viewpoint as concerns the ways of science proper. At first it might have not been obvious what the consequences would be, but nowadays it has become quite obvious. In retrospect we can give a crushing verdict on what happened then.*

‘A breach between religion and science in the early modern age’ (6) (15th until 17th century)

6.1 – The distinction between theology and philosophy

What calls for our attention is not so much the development of science in detail, but the analytical and deductive tool of reasoning that lies behind it, and its relation to the religious precepts of man. We shall not tally the discoveries that led to our present-day world. It is not the application of science and its discoveries that concern us, but the application of thought. We owe the modern scientific practice to philosophy and its corollary mathematics.⁽⁵⁴⁾ Indeed, mathematics is a form of philosophy. This couple passed through all the important ‘houses’ while chasing religion from its abodes, leaving an incredible devastation in their path. Some of the houses that come to mind are medical practice, law and order, politics and warfare, socio-economic government, administration and business. Finally, in the second half of the 20th century, the house of Christian Faith was visited. Religion was ousted and replaced by novel philosophical concepts. Religion is not exempt from philosophy. We call it theology, but theology is disciplined by faith, whereas philosophy is not. Very importantly, theology derives its pattern of thought from the supernatural, sometimes called the fifth dimension in Jewish mysticism, whereas the natural world just knows four. The fifth lies beyond our grasp unless revealed to us by God.⁽⁵⁵⁾ So it is that Scripture is not suited to a self-opiniated interpretation (2 Peter 1:20). Significantly, the Torah is comprised of five books. Anselm would feel at ease with this line of thought. In his Proslogion, which is a discourse on the existence of God written in 1077-78, he shows how in the quest for the ever greater God both the mystical and the theological fuse. In the quest for that supreme ‘esse’ He reveals Himself through His Word, addressed to humans (very important: we are part of the equation), as being the Life who transcends life (Vita summa vita). By the force of his intellect and through words Anselm notices that he discovers God only partially – but it nevertheless is a discovery – and that he needs the heart to discover God in His indivisibility ...and even then! The burning desire to get to know God, the Word above each word, is always insufficiently met. One century after the Proslogion was written, William of Auxerre (ca 1150-1231) meagerly defines theology as a science. In his view, its first principles, the articles of faith, are

axiomatic; known immediately as such, they can be used as premises in demonstrative syllogisms ⁽⁵⁶⁾ that yield scientifically valid conclusions. Although this statement has some merit, in its oversimplification it becomes false. Thus formulated, it blurs the distinction between theology and philosophy. It is a death sentence to put religion on a par with philosophy. Now that, in our age, God is dead, except for the true believers, we are seeing the abomination of desolation, spoken of by Daniel the prophet, erected in the inner sanctities of humankind.

6.2 – *The limits of science (geometrical thinking analysed)*

Of each house much has been written about the introduction of the ‘Cartesian’ mode of thinking, a term derived from the name of that famous Frenchman René Descartes, who lived in the first half of the 17th century. He summed up the crude method of analytical and deductive reasoning. So, let us look a bit closer at his ideas. He said: *“I shall bring to light the true riches of our souls, opening up to each of us the means whereby we can find within ourselves all the knowledge we may need for the conduct of life and the means of using it in order to acquire all the knowledge that the human mind is capable of possessing.”* Well, this seems a strange remark for someone who discovered the cool analytical approach. We should be aware, however, that knowledge in Descartes’ day was a bizarre mixture of fact and imagination, myth and the occult, religious dogma and wild conjecture and he too had some bizarre ideas, but that is of no importance. What matters is that he gave us the rules for scientific logic as it is still practiced today. These are described in his introduction to his “Essays” published in 1637. The title of the introduction was “Discourse on the method of rightly conducting one’s reason and seeking the truth in the sciences”, which happened to be a development of an earlier unpublished work: “Rules for the direction of the mind”, written nine years earlier. His method – he himself states – started with a sudden revelation on November 10th, 1619, while staying in a German village near Ulm. Revelation or not, it proved a momentous occasion for the advancement of science. He mentions four stages, which he says are based on the premise that all human knowledge of things can be derived from the geometrical method.



René Descartes

The four stages are defined as follows:

- 1) **Evidence:** accept for fact-gathering only as true that which gives a clear idea to the mind (*clare et distincte percipere*);
- 2) **Division:** split problems into smaller units, as many as possible;
- 3) **Increasing complexity:** attack problems by going from the most simple to the most complex;
- 4) **Exhaustiveness:** check everything carefully and leave nothing out.

The scheme explains why mathematics are such a powerful tool of manipulation and allows scrutiny of any object under consideration. By crudely reducing complex realities to simple geometrical concepts, Descartes invented the scientific method. This seems neutral, but it is not. A

geometrical figure or body consists of points. The simplest object in such a figure is a point, definitely the last frontier of reduction. A point derives its function from the structure to which it belongs. A group of objects or figures, designed like points on a scale (a gauge / benchmark), consists of dispensable and interchangeable units. A point is a point. What value does a point have?

In this way everything and everyone is referred to ideal bodies where points of reference decide the action. The process of reduction has been applied to all fields of human endeavour. So, for instance, people too are reduced and made into objects, non-persons, like points on a scale. In ancient Greece there was a similar philosophy. The ideal society for Plato consists of 5,040 subjects because they can be divided by all numbers up to 12 except for 11. This allows for the maximum of statistical differentiation. Imagine, how fabulous it must be to be king of that society and to dictate its rules with mathematical precision! But beware! Whoever does not fit within the ideal mould shall be brutally 'reduced', to become a point, a mere object. God created man equal, that is to say, with respect to the unique qualities of each. As the Mishna observes (Sanh. 4:5):

«« Adam, was created for the sake of peace among men, so that no one should say to his fellow: My father was greater than yours (...) Also, man (was created singly) to show the greatness of the Holy One, Blessed be He, for if a man strikes many coins from one mould, they all resemble one another, but the King of Kings, the Holy One, Blessed be He, made each man in the image of Adam, and yet not one of them resembles his fellow. »»

Each individual has its own and invaluable service to the whole of the many-faceted society, but the mathematical approach is the negation of it. From that point of view a group of objects (points on a scale) consists of dispensable and interchangeable units. Following the Cartesian system of classification all events are described by numbers. Essentially, numbers describe equality or distinction: when submitted to a comparison something can be the same or different with regard to an aspect under consideration. All aspects and things can be defined by a yes or no, a one or zero, the "est et non" of Pythagoras. This very principle also determines computer language and its quasi-unlimited power of description. It is not difficult to understand why the Cartesian system becomes a dangerous tool if pushed to its extreme and applied to the social fabric of society. While unnecessary to insist on the efficiency of the geometrical spirit if it goes along with restrictive qualities, we should clearly condemn its unrestrained exercise.

The first stage, that of fact-gathering, implies that only that which is measurable and evident to the eye is worth noticing. What falls outside this field of view does not exist! To deny the soul in this system is easy. It suffices to 'observe' that it is not observable. My dictionary says that observable means 'apprehensible as real or existent'. How convenient! The Cartesian mind will make no room for any knowledge claims made about how the world might really be as opposed to the deductive claims derived from the mathematical model.

The second stage of splitting a problem into smaller ones has shown its worth, but here too some drawbacks appear. In its practical application there is a need to 'reduce' the infinite variety of the real world to a manageable amount of qualities which then becomes a crude but very useful approximation of reality, but crude it is. There is a saying: "He who says that the sky is blue becomes colour-blind." Moreover, it does not show how to take account of the whole, but it shows how to split a problem into smaller parts. In fact, it creates a kind of myopia, because only the detail is reckoned for.

We now come to the third stage of the Cartesian method, characterised by an expanding complexity as a consequence of ever more formulations of minute problems, each one providing its own and partial solution. Jules Poincaré wondered: *“He who has only studied the elephant by means of a microscope, does he really believe that he sufficiently knows that animal?”* In this approach the whole is seen as an assembly of parts, like a car built on an assembly line. The Cartesian formula reads: “The universe is a machine where nothing else needs to be taken into account other than conceptual figures and the movement of its parts.” Nothing remains except sizes, figures and parts, which gave Descartes the idea of the animal-machine. Then, of course, man is also a machine and so it becomes extremely difficult to point out the difference between a computational machine and the brain. The processing speed and language level of a computer is expected to surpass the capacity of the human brain within fifteen years! We only need to infuse some kind of self-conscious, and there we are: a machine with a soul, ...and questions will arise about the ethics of euthanasia. Are we allowed to cut off its electrical supply?

The Cartesian Catastrophe

Descartes stated that feelings are no basis for certain knowledge. And he continues: What remains is thinking, which comes forth from the individual essence, the “I”; conversely, the fact that I think proves that I have an “I”. In this way he came up with the famous saying “cogito ergo sum”, which means: ‘I think, therefore I am’ or better: ‘I think, therefore my “I” exists’. Thinking, in following the Cartesian train of thought, would lead to ‘certain’ knowledge. Arthur Koestler completely disagrees: *“Modern philosophy starts with what one might call the Cartesian Catastrophe. The catastrophe consisted in the splitting up of the world into the realms of matter and mind, and the identification of ‘mind’ with conscious thinking. The result of this identification was the shallow rationalism of the l’esprit Cartesien...”*

“The Act of Creation by Arthur Koestler” # 1964 (p. 148)

The increasing complexity of the analytical-deductive method of René Descartes is an unstoppable autonomous development. On its way, the whole, as object of consideration, disappears beyond the horizon. The specialisations that follow in the wake of a greater complexity take on their own life without any clear relation to the unified whole, until finally a point is reached that they compete each other. The increased complexity as a function of the deductive method leads to a lack of understanding of the general terms as well as to a growing number of specialisations. The sum is more than the addition of its parts, known as the ‘emergent property’, but the deductive thinking couldn’t care less.

The trend to an excessive specialisation in our modern society is a phenomenon that often leads to problems of manageability, as can be observed in for instance the medical sector. Inductive thinking tries to come to general leading principles based on the details and it seeks to formulate new paradigms, while pure deductive thinking remains far from it. The use of the inductive approach circumvents the problem of manageability and diminished it, as with each novel and valuable inductive insight a new cycle is born that pushes back the frontiers to which the deductive process constrained itself. A turning wheel is thus created that goes from deductive to inductive reasoning and again to deductive reasoning, and so on.

Our present higher education teaches students ingenious tricks, while the critical thinking that belongs to the inductive thinking process, is not stimulated, even punished where reputations are at stake financial interests might be hurt. That is because the thinking that opens up new

horizons almost always means that the old ways have to disappear according to the French saying: “reculer pour mieux sauter” (retreat in order to better jump).

We now come to the fourth stage. Enumerate everything without exception. Certainly no exceptions are allowed ‘within’ the system that reduces everything to the universal geometry of Descartes. The point is, that the points or units have to fit the design. Any point that is not designated or entitled, is left out of the plan. Does not exist. Actually, we are dealing with an ‘illusion’ caused by a deliberate narrowing of the mind. But within the narrow perspective everything is taken into account.

When a few years ago the European Commission was confronted with the question whether to put an import ban on genetically modified soya from the United States, for which they finally gave an import licence, a spokesman said to defend the dubious decision: “*Because no scientific evidence exists of possible harmful effects, the European Commission cannot put forward an argument to impose a ban.*” He could not say: “European laboratories of the highest standard have researched the issue ‘exhaustively’ and have consequently reached the conclusion that it is not detrimental to our health.” (see Appendix) He did not formulate it that way because then the weakness of reasoning would become obvious. No method is really exhaustive, certainly not with such a complicated matter as genetics. He therefore reverted to an administrative rule that excludes arbitrariness, a rule cast in the same Cartesian logic that at one time was adopted within the house of government. **As long as one remains within the enclosure of the cartesian logic, the arguments are characterised by a full and precise expression.** The mental design is an invincible fortress because it cannot be attacked from within, as totalitarian regimes were happy to recognise. We have seen the non-too-happy results...

Cartesian logic is a closed logic system

The mental design of the Cartesian system is an invincible fortress because it cannot be attacked from within. Its rules are axioms (truths beyond question or things taken for granted), and they are axioms not because they are derived from the world as it is, really is, but because we think they are useful to be accepted as true. And they are useful, because the axioms we accept capture (correspond to) some aspects of reality. A useful axiom, within our frame of reference, is that parallel lines never meet, which seems obviously true. But in a different set of reality it is not true: parallel lines meet on a sphere! Because axioms are beyond question, the conclusions based on those axioms cannot be attacked if those axioms are taken for granted under a given set of conditions. That is why Cartesian logic is invincible as long as we follow its rules.

6.3 – The horrors of a one-sided approach that eschews our divine calling

The spirit of geometrical thinking has reached its apex in the figure of Peter Singer, who has been Professor of Ethics at the prestigious Princeton University in the United States since 1999. His acclaimed philosophy follows three principles: atheism, Darwinism and utility. These lead him to the one incontrovertible conclusion: that the human race cannot claim a privileged position relative to animals. His system is geared to increase the cumulative happiness of both animals and humans and at the same time to decrease their cumulative suffering. In his system the ‘quality of life’ of both animals and humans is the ambitious goal. The eating of animals infringes animal rights and is wrong, for it would not promote the greatest good for the greatest number of species. He strongly condemns speciesism: to assert the divine calling of the human species and its unique place in the plan of creation he regards as contemptible speciesism. His utilitarian

principle holds that pain is the only real evil and pleasure the only real good, though he admits that some pain may serve for the attainment of good, like going to the dentist. Pain must be avoided, if necessary by terminating life. Many of Singer's ideas are absurd, but within his self-contained system of ideas they are totally logical and acceptable. Of course, Singer places no greater value on the life of a human baby than on the life of an animal; the life of a healthy chimpanzee, termed a non-human-animal, would be more worthwhile than of a seriously handicapped child or of some person in a progressed state of senility. Peter Singer feels no qualms at terminating the life of the disabled if his perceived quality of life is below the mark. Surprisingly, he thinks that abortion is only acceptable for health reasons, not for mere convenience (here he does not respect his own system). Euthanasia is extended to newborns who happen to suffer from a severe physical or mental disability without prospect for improvement. And so the litany of woes goes on.

6.4 – The devil's apple

The unrestrained application of the Cartesian system would probably not have taken place if an extreme rationalistic attitude had not previously taken hold. It was a cross-fertilisation from the houses of religion and politics that paved the way. We have to turn to the first part of the 16th century to find the hero of rationalism, Luther, though he was not a rationalist as we would call it today. His angle of attack was that faith cannot be dissociated from reason; if assumed to be inconsistent with pure reason, faith was at fault. Though Scripture was 'supra rationem', according to Luther, nothing should be accepted 'contra rationem' (conceived according to our narrow-minded views). To Luther, if faith was inconsistent with reason, faith was at fault. This means that what cannot be seen and cannot be understood, cannot be accepted. Curiously enough Luther, who formerly was a priest, did not dismiss the Eucharistic sacrament (later in his life he did). By contrast, the Thomistic view holds that an article of faith that is beyond understanding, will at some time be understood, though not without the divine assistance. This is the common teaching within the Roman Church, without which theology is doomed to become a vain enterprise, reminiscent of the rambling of the primitive faiths while on the other hand it prevents the desecration of everything, by an attitude so characteristic of a certain brand of Protestantism. This we read in "Katholieke Dogmatiek" (1951) by the Dominicans A.H. Maltha and R.W. Thuis:



Mandragora

«« The Fifth Lateran Council (1512-17) teaches that every statement that is in contradiction with a truth of the faith is completely false (Denz.738); Vatican I (1869-1870) expressly confirms that no contradiction can exist between belief and reason. Since in the end both the article of faith and the natural truth repose on God's understanding, it is impossible for there to be any contradiction between what is believed and what is perceived. Hence every difficulty of reason must be resolved at least in the sense that it is demonstrated not to be necessarily true in the field of this or any other supernatural reality. »» (pp. 191-92)

The works of Shakespeare have a dubious quality

Yes, even the works of Shakespeare are tainted with Machiavellianism and are thus quite dubious in that respect. Let us see what the incomparable Louis Veuillot has to say in this regard, as presented in “The evil Masters”: ⁽⁵⁷⁾

«« Shakespeare is a great connoisseur of the human heart, a profound philosopher, an admirable poet and one of the richest ever seen, powerful creator and full of fire, of an incomparable abundance. What characters, what combinations, what eloquence proper to all those dramatic situations that he creates tirelessly, with an ease, a fruitfulness and a harmony that contain the earth’s creative force! [Yes, indeed; but here is the reverse side:] With all that, Shakespeare is no great soul; he has despised humanity, despised himself. He is nothing but a big mirror. But the devil has thrown his evil stones at the mirror. They have made holes and fractures that break up the harmony, and the image is no longer sufficiently faithful; nothing is in the resemblance of God: “*Ut dum visibiliter Deum cognoscimus per hunc in invisibilium amorem rapiamur.*” (That through knowing God visibly, we may be caught up to the love of things invisible) ⁽⁵⁸⁾ In these words there is an absolutely sovereign law of Art; and every work in which it is not observed misses the goal that the artist must pursue, since all of nature is destined to reveal it and to allow us to attain it. God is formally absent from the Shakespearian nature. [Veuillot recognises that none of Shakespeare’s works “*cannot be properly said to be immoral. Everywhere evil is stigmatised and punished; good triumphs.*” But one feels that the author, as Veuillot puts it, “*is indifferent to evil or to good. He paints. Only Man seems to have no judge. He is purely under the law of fatality.*” Louis Veuillot detects these serious defects successively in his judgements on the poet’s principal dramas: Hamlet, The Tempest, Anthony and Cleopatra, A Comedy of Errors, Macbeth. With regard to Hamlet:] (...) We believe that the dramatic poet has no right to create a scene in which a son is forced to despise his mother absolutely and who, as king, must punish her. “*Honour thy father and thy mother*”: that is the law of God that has primacy over the law of drama. Despite his madness, Hamlet is not presented as a purely blind tool of Providence. He reasons too much to be regarded as not being conscious of his acts. »» The comments placed between brackets – thus [...] – are by Bontoux.

The Lutheran way of thinking ingrained in the Protestant mind and it became a solid part of its mental make-up. Transposed to the other houses **and blended with the philosophy of Machiavelli** (1469-1527) and the like, the Reformation produced a terrible potion. The Renaissance was an age with a tremendous urge for freedom, for the self-determination of Man, an age, therefore, of the fomenting of many new ideas and attitudes. She is not necessarily demarcated by the second half of the 15th century and the first half of the 16th if we like to define it as Humanism, and we all know that the exaltation of the individual was the point of departure of Humanism. Its model was sought in the idealised antiquity of the Greek and Romans, ⁽⁵⁹⁾ still badly understood, thus farther back than our Christian roots. Characteristic – how could it be otherwise? – was that hostility to the hierarchy, which displayed itself in contempt for the holy institution of the Church and its priests. The strongest evidence of this is to be found in Machiavelli’s Discourses ⁽⁶⁰⁾ and in his burlesque play The Mandragora, which portrayed the priest in the attire of the hypocrite. This brought him instant fame. The mandragora or mandrake is a plant known also as the devil’s apple, that soon after harvest starts to have a foul smell, which was meant to point at the Roman Catholic Church – yet this symbolism was not understood at the time. It was thought rather amusing, also by the ecclesiastical authorities who did not perceive it as an attack, but clearly it was one because Machiavelli hated the Church. Bertrand Russell begins his biography on Machiavelli in this way: “*The Renaissance, though it produced no important theoretical philosopher, produced one man of supreme eminence in political philosophy: Niccolò Machiavelli.*” His most famous work, “Il Principe” (The Prince/Ruler), should be read together with his “Dis-

courses”, a much more substantial work written at the same time, for otherwise the reader is likely to get a very one-sided view of his doctrine. The main theme of these books is how the princes of this world maintain authority, which insight he gained through keen observation of contemporary and historical precedents. Its publication in 1532, five years after his death, was an immediate success, but because of a papal ban the second edition did not appear until 40 years later. Many a ruler was enticed. Charles V seems to have known whole chapters by heart and the kings of France, Henry IV and V, never lost sight of the book. And Christine of Sweden is known to have made long commentaries on it.

6.5 – *The means serve the end*

In 1513 Machiavelli writes “The Prince”, in which he lays down his observations of the criminal political process, without expressing his disapproval and giving the impression that this is the way it always happens. Machiavelli’s description of the politics of the princes is nothing more than the application of the utility of a deed (here we recognise Singer): the rabid application of ‘the means serve the ends’ regardless of the ethical value of the means being applied or whether the ends are considered laudable. Machiavelli talks about the way princes act. We would now call them politicians instead. The French ‘politicien’ means politician in English, but in French it is sometimes used pejoratively to indicate someone who shows, by means of scheming, great dexterity in maintaining himself in his plushy function. The names of the game are pragmatism, opportunism, ruthlessness, unscrupulousness and deceitfulness.

«« Much of the conventional obloquy (says Russell) that attaches to Machiavelli’s name is due to the indignation of hypocrites who hate the frank avowal of evil-doing. (...) Such intellectual honesty about political dishonesty would have been hardly possible at any other time or in any other country, except perhaps in Greece. (...) Perhaps our age, again, can better appreciate Machiavelli, for some of the most notable successes of our time have been achieved by methods as base as any employed in Renaissance Italy. He would have applauded, as an artistic connoisseur in statecraft, Hitler’s Reichstag fire, his purge of the party in 1934, and his breach of faith after Munich. »»

Yet, Russell tends to forget that the interpretation of an event is in the eye of the beholder. Of course, the ruthless prince exists, but not all princes who stay in power are ruthless and there are eras that are more virtuous than others. There is also a great difference between someone acting against his virtuous convictions because unable to withstand the pressure brought upon him and someone who consciously and wilfully perverts his ways. Russell says furthermore:

«« The love of ‘liberty’, and the theory of checks and balances, came to the Renaissance from antiquity, and to modern times largely from the Renaissance, though also directly from antiquity. This aspect of Machiavelli is at least as important ⁽⁶¹⁾ as the more famous ‘immoral’ doctrines of The Prince. (...) whole chapters from the Discourses seem almost as if they had been written by Montesquieu; most of the book could have been read with approval by an 18th century liberal. The doctrine of checks and balances is set forth explicitly. Princes, nobles, and people should all have a part in the constitution. »»

In this, also, he was continuing a centuries-old discussion on the place of the Church in the business of government. The next step was the advocacy of the complete separation of church and state. It seems that the earliest known proponent of this scheme is to be found in Faustus Socinus (1539-1604), the Latinized name of Fausto Paolo Sozzini. He happens to be the Father of Freemaçonry, then called differently. We will come back to it. Siena was his town of birth. He was consumed by hatred for the reign of Christ on earth, its institutions and teachings, which is reflected by his statement that it is unlawful for a Christian to hold a magisterial office (tea-

ching function). Early in life – he was only nineteen – the suspicion of Lutheranism fell on him in common with his uncles Celso and Camillo. Yet the evangelical positions, whether taken from Luther, Calvin or some other schismatic or sect, were not radical enough for him. At age twenty three, in his *Explicatio* of the proem to John's Gospel, he attributes to our Lord an official, not an essential, deity. In a letter written the following year he rejects the natural immortality of man.

What is meant by 'pure reason'

Though Scripture was 'supra rationem', according to Luther, nothing should be accepted 'contra rationem'. By contrast, the Thomistic view holds that an article of faith that is beyond understanding, will at some time be understood. We can show by way of analogy that Thomas Aquinas is right and Martin Luther wrong:

Physical science knows many phenomena that are beyond understanding. It is, for instance, generally accepted that gravity is not properly understood. Yet it is the most important large-scale interaction in the universe. One of the consequences of this lack of understanding is that no objective method exists to establish the weight of a kilogram. As of now, the prototype kilogram is kept at the "Bureau International des Poids et Mesures" (BIPM) in Sèvres, near Paris. This means that the prototype always has a mass of 1 kg, even when it gets 'heavier' as a result of accreting dirt from the atmosphere, or 'lighter' as a result of cleaning. One wide-reaching consequence of defining the kilogram in terms of a material object is that if the mass of this object changes, the values of all the other masses in the whole of the universe will change as well. If the prototype kilogram in Sèvres were to gain one millionth of its mass (1 milligram) because of specks of dust, the relative weight of the earth would decrease proportionally. To visualise the chunk that would be lost in terms of weight (divided by the density of the earth's mass), this would equal a country the size of France sinking two kilometers into the earth. This lack of precision is not how it should be, but we can live with it because everyone expects that one day the problem will be solved. Gravitation can easily be experienced, but I like to point out that gravitation itself cannot be seen. Mass (an object) can be seen, but gravitation can only be observed through its effect called weight. In this way the gravitational concept resembles an article of faith.

Like the gravitational concept, an article of faith does not come out of thin air. God always presents an article of faith to humankind with manifestations to attest to its veracity. See for instance the book of Jean-Marie Mathiot who documented the more than 150 Eucharistic manifestations in course of time, which were officially recognized. He calls them miracles, but I prefer to call them manifestations of the Eucharistic miracle, a subtle but very important distinction. The Eucharist, more in particular the transsubstantiation, falls in the category of an article of faith 'not yet' properly understood [See: "Miracles, signes et prodiges eucharistiques" - éd. du Parvis # 2004].

During his whole life, he trusted the conclusions of his own mind and he pursued the aim of reducing the fundamentals of Christianity, trying to push them beyond the fringes of real life. Not without reason does the memorial tablet at Siena, inscribed in 1879, characterizes him as the vindicator of human reason against the supernatural. The inscription on Faustus Socinus' grave once read "*Tota jacet Babylon destruxit tecta Lutherus, muros Calvinus, sed fundamenta Socinus*", or: "Luther tore down the entire roof of Babylon (the Roman Catholic Church), Calvin threw down its walls, but Socin robbed it of its foundations." This elegiac distich in hexameter was composed shortly after Faustus Socinus died in the Polish village of Luslawice, the place where he was also buried. It might have been part of an eulogy by his confidant Piotr Stoinski, who delivered the funeral speech. A couple of years later his mausoleum was destroyed by pious peasants who feared that the disastrous weather conditions had been brought upon by the honour given to Fausto through the splendid mausoleum and the horrible epitaph. They did, however,

permit his bones and a limestone block to remain on the bank of the River Dunajec. In 1933, the despoiled grave with its illegible inscription was moved to a nearby property and was soon incorporated into a new mausoleum of much poorer condition than the original one. The epitaph now reads in Italian: “*Chi semina virtù, raccoglie la fama, e vera fama supera la morte*”, or “Who sows virtue reaps fame and true fame overcomes death”. It seems unlikely that this was the original version for a number of reasons. The “*Tota jacet...*” on Fausto’s grave is referred to in Robert Wallace’s “Antitrinitarian Biography” of 1850. It was the custom at the time to write in Latin and Fausto himself was fluent in Latin. And finally, it explains the zeal of the local peasants in destroying the mausoleum.

Fausto’s ideas were largely taken from his uncle Lelio or Leo Sozini (1525-62), who in his turn was influenced by the antitrinitarian Paolo Ricci from Palermo (1500-75), known as Camillo Renato after he left the Church, known also as Lisia Fileno or Fileno Lunardi. Paolo Ricci can be regarded as the first founding father. It was Lelio who took over the torch. Paolo and Lelio were not the only antitrinitarians in Europe – they included all who deny Christ’s divinity in one form or another. Antitrinitarianism was in the air. In 1553 Michael Servetus was burned for it at the stake in Geneva by verdict of the Magisterial Reformers, i.e. Calvin. Servetus had published “*De Trinitatis Erroribus*” in 1531. This work was soon forbidden, but it marks the beginning of antitrinitarianism as a coherent system.

The four dimensions of space (time is no dimension)

The four primary dimensions of space are those we are accustomed to. The first one is emptiness, utter emptiness. This is represented by a point, because a point has no extension but contains all possibilities of unfolding granted to it by God. This point belongs at the beginning or point of inception of the universe. It thus constitutes its midpoint. Remarkably, because empty space is infinite, any point is its midpoint and therefore all physical laws are the same everywhere (conversely, because observation shows that the physical laws are the same on two different places, it proves that the universe is infinite). The second dimension is the first extension that consists of a line, departing in both directions. The third dimension is a line which extends perpendicular to the first line; perpendicular because equidistant. We now have a plane. The fourth dimension is a line which extends perpendicular to the first two lines, crossing them in the middle. This creates a volume, measurable according to the three ‘visible’ dimensions in space. This is unconventional. Instead, the scientific establishment regards time as the fourth dimension while the first would be a line, an approach difficult to accept because time is not a spatial extension (it is also present in the devolution of dimensions). Time, as we use it, is a counting of events that seem to repeat at regular intervals. This application of time is nothing other than a means of comparison, a yardstick, and cannot be a ‘dimension’. Yet it is very useful to gauge other events. Real time is different, it is God’s plaything, called prophecy, which intrinsically belongs to the supernatural fifth dimension.

That ‘time’ is the fourth dimension was first postulated by the German mathematician Hermann Minkowski in 1907. The beginning part of his address delivered at the 80th Assembly of German Natural Scientists and Physicians (21 Sept. 1908) is now famous: “*The views of space and time which I wish to lay before you have sprung from the soil of experimental physics, and therein lies their strength. They are radical. Henceforth space by itself, and time by itself, are doomed to fade away into mere shadows, and only a kind of union of the two will preserve an independent reality.*” The paper was called “*Raum und Zeit*”. The theory of four dimensional space–time has since been known as the ‘Minkowski spacetime’.

Notes

Without the mathematical tools modern science would be impossible

(54) One of the earlier great mathematicians, the Italian Leonardo Fibonacci da Pisa (1170-1250), gave the abstract manipulation of numbers the required intellectual framework in his “Liber Abacci” (Book of Calculation). He advocated the introduction of Arabic numerics, including the zero, and proposed the idea of a bar for fractions. Still, it took another 300 years to be generally accepted. It then needed the invention of decimal fractions (1585), literal notation (1591), the logarithms (1614) and differential calculus (1684), without which modern science would be impossible.

Simon Stevin published “La Disme” in 1585, introducing decimal fractions into arithmetic but first applied by Napier (it was however first discovered in 952 or 953 by a Syrian mathematician Abdul Hassan al-Uqlidisi, unknown in the West). In 1591 François Vieta introduced literal notation – the use of letters to represent coefficients and unknown quantities in equations, which was further developed by Descartes in an appendix to his “Essays” from 1637. Vieta was the first to devise the method, to be known as analytical geometry, of constructing a geometric figure related to algebraic terms (on an x and y axis). In 1614 John Napier introduced logarithms, which was the culmination of successive efforts to manipulate functions of higher degree (Tartaglia and Ferro solved cubic functions published in 1545 and Stevin solved functions of powers higher than three, published in 1585). John Wallis published “Arithmetica Infinitorum” in 1655, which studied infinite series and products, solved problems of quadratures and found tangents by use of infinitesimals. Finally it was Newton who found differential calculus (or calculus), presented in the “De analysi per æquationes numero terminorum infinitas”, which circulated in manuscript form as from 1669 and was first published in 1711. He further developed calculus in a manuscript of 1671, called “Methodus fluxionum et serierum infinitarum”, only to be published in 1736. Leibniz, however, published differential calculus much earlier, in 1684, and did it independent of Newton (without the two compensating errors contained in Newton’s manuscript).

The supernatural fifth dimension

(55) The supernatural, sometimes called the fifth dimension in Jewish mysticism, whereas the natural world just knows four. Interestingly, the name Judah is written with the tetragrammaton (which is the sacred Name of God as written in Hebrew) and an additional letter, the dalet, which amounts to 5 letters (yod, hê, waw, dalet, hê). Judah, Jesus’ ancestor, is therefore the door (dalet) through which the divine, Who resides in the supernatural 5th dimension, enters our world, which indeed happened in Jesus Christ in whom the highest natural and supernatural are one.

(56) A syllogism reaches a conclusion as a logical consequence of two preceding premises.

(57) “Les Mauvais Maîtres” par le Chanoine titulaire G. Bontoux, 1914.

That through knowing God visibly...

(58) Saint Thomas Aquinas comments (Summa Theologiæ II-II, qq. 82, a3) :

«« Matters concerning the godhead are, in themselves, the strongest incentive to love and consequently to devotion, because God is supremely lovable. Yet such is the weakness of the human mind that it needs a guiding hand, not only to the gradual acquaintance of knowledge, but also to the love of divine things by means of certain sensible objects known to us. Chief among these is the humanity of Christ, according to the words of the Preface for the Nativity of Our Lord (from the extraordinary form of the Mass): **“That through knowing God visibly, we may be caught up to the love of things invisible.”** »»

The year of birth of the Renaissance

(59) It can rightly be said that the Renaissance was born in 1465 with the printing of the first Classical text at Mainz. By the end of 1500 more than 350 printers in over 70 locations had contributed to the printing of more than 1500 separate editions. Almost every Classical Latin author had been printed by then, many in multiple editions, and the printing of Greek authors was well under way. See “Printing the Classical Text” by Howard Jones ¶, which presents a comprehensive

survey of this period in the dissemination of the Classical text. Since the course of classical printing cannot be viewed separately from the course of printing generally, the opening chapter of the book locates Classical printing within the wider context that affected the printing industry at first.

¶ HES&DE GRAAF Publ. - The Netherlands, 2004.

Howard Jones is Professor of Classics at McMaster University, Canada.

Machiavelli hated the Church of Rome

(60) The full title of Machiavelli's discourses is: Discourses on the first decade of Tito Livy. This book was only published four years after his death. Here, his discussion of the Roman Catholic Church is totally frank and uncompromising. To quote: *"The nearer people are to the Church of Rome, which is the head of our religion, the less religious are they (...) Her ruin and chastisement is near at hand (...) We Italians owe to the Church of Rome and to her priests our having become irreligious and bad."*

The democratic ideal set forth in the 16th century

(61) The love of 'liberty', and the theory of checks and balances is an important aspect of the political ideals of Machiavelli, in which he stood not alone. Two other contemporaries, though less important, exposed the same ideas. Francesco Guicciardini in his 'Del Reggimento di Firenze' (1526) and Baldassare Count of Castiglione in his piece of music 'Il Cortegiano' (1528), still being played today.



See Appendix

APPENDIX

Wisdom of the Cows

**From: “Seeds of Deception – Exposing Industry and Government Lies
about the Safety of the Genetically Engineered Foods You’re Eating”
by Jeffrey M. Smith, Yes! Books, Fairfield, Iowa USA – 2003 (p. 76)**

“Seeds of Deception” is the first book to make a convincing case for the existence of a genuine conspiracy on the part of the biotechnology industry to suppress free speech, debate and even scientific dialogue about the safety and value of GMOs (genetically modified organisms). In doing so, Jeffrey Smith paints a vivid and disturbing picture of governmental passivity and scientific neglect of urgent problems associated with genetically engineered agriculture. By putting together over a dozen episodes of interference and collusion against activists who have questioned the wisdom of proceeding unabated with this collective, non-consensual experiment with our food, Smith shows how industry proponents have done themselves and a whole generation of consumers a massive disservice in the name of corporate profits and short-term private gain.

Appraisal by Marc Lappé, Ph.D. (Co-Director of the Center for Ethics and Toxics)

Bill Lashmett told the writer of the book the following story. It was in 1998 that Howard Vlieger harvested both natural corn and a genetically modified BT variety on his farm in Maurice, Iowa. Curious about how his cows would react to the pesticide-producing Bt corn, he filled one side of his sixteen-foot trough with the Bt and dumped natural corn on the other side. Normally, his cows would eat as much corn as was available, never leaving leftovers. But when he let 25 of them into the pen, they all congregated on the side of the trough with natural corn. When it was gone, they nibbled a bit on the Bt, but quickly changed their minds and walked away.

A couple of years later, Vlieger joined a room full of farmers in Ames, Iowa to hear Al Gore, the Vice-President, who was in the contest for the United States presidential election of the year 2000. Troubled by Gore’s unquestioning acceptance of GM foods (genetically modified foods), Vlieger asked Gore to support a recently introduced bill in Congress requiring that GM foods be labeled. Gore replied that scientists said there is no difference between GM and non-GM foods. Vlieger said he respectfully disagreed and described how his cows refused to eat the GM corn. He added: “*My cows are smarter than those scientists were.*” The room erupted in applause. Gore asked if any other farmers noticed a difference in the way their animals responded to GM food. About twelve to fifteen hands went up.

Similar stories were told by others:

“If a field contained GM and non-GM maize, cattle would always eat the non-GM first.” (Gale Lush, Nebraska)

“A neighbour had been growing Pioneer Bt corn. When the cattle were turned out onto the stalks they just wouldn’t eat them.” (Gary Smith, Montana)

“While my cows show a preference for open-pollinated corn over the hybrid varieties, they both beat Bt-corn hands down.” (Tim Eisenbeis, South Dakota)

According to a 1999 “Acres USA” article, cattle even broke through a fence and walked through a field of roundup Ready corn to get to a non-GM variety that they ate. The cows left the GM corn untouched.

The Ascent of Man and Science in confrontation with the Mysterium Coniunctionis

***Introductory note:** In the last chapter we have seen how the rationalistic spirit caused a derailment in our way of thinking. To quote Marsman again: “No God or society to involve my existence in a living relationship, no horizon or sea, no poor grain of sand in the nameless ups and downs of the burning desert!” We are now going to see the submission of ‘the Reason of God’ to the ‘Sovereignty of Man’, not something to be addressed in a few lines. It is a complicated affair. Yet, we cannot deny that more than a few God-haters have determined the course of action.*

‘From the Reformation onwards to early modern science’ (7) (16th and 17th century)

7.1 – That particular aspect of Luther’s theology must have attracted Fausto

We have not yet really focused on Luther, who represents a milestone along the way towards the deification of reason. His Old Testament God was a God of power, his New Testament God one of Love, but the God of the theologians, of which Luther was a specimen, was one whose appeal is foremost intellectual; His existence seems to be there to help man to understand the universe. That particular aspect of Luther’s theology must have attracted Fausto, which explains why the first public apparition, but not its creation, of the anti-Christian sect under the name of Freemasonry was chosen to occur in 1717 – year of the establishment of the Mother Loge of London – on the bicentenary of the Protestant movement. It was the Huguenot cleric and scientist Désaguliers, the 8th successor to Fausto, who was one of the prime movers for the inauguration of Freemasonry. Fausto could not be a ‘Freemason’ for a movement under that name did not exist yet, but he surely was in spirit, and probably to a great extent in form. And how better to define the spirit of Freemasonry than to say that it is the vindication of human reason, or gnosis, set against the supernatural? In Fausto’s time the adepts greeted each other with “*ave frater*”, to be answered by “*rosae crucis*”, the rose being a symbol of hermeneutical or secret knowing, and the cross of the religion that had to be crushed.



The Lutheran Seal

One should know that the sect not only used the Rose Cross. For the perfect initiates there was the Gold Cross and they answered instead ‘*aureae crucis*’. The (few) perfects understood that the philosophers’ stone vainly sought after by alchemists who tried to make gold from lead, was obtained only through the adoration of Satan and his works. Fausto’s immediate followers called

themselves, amongst themselves, not Socinians nor Unitarians, but “Brothers of the Cross of the Rose”. It was not themselves but others who called them Socinians after Fausto Socinus (the nephew of Lælius). Lælius, at that ill-fated meeting in 1546, the so-called, founded the sect in a recognisable form. We come back to that later. However, its goes back even further. The Knights Templar are probably at the root of it. The end-time prophetess MDM says in her message from April 29, 2012: *“God and all his works have been plotted against by Masonic groups (under different names), established in the Middle Ages. Their allegiance is to the evil one. He, Satan, is their god and they are proud to pay homage to him through Black Masses.”*

Only after a meeting in 1617, on October 31st, called “The numbering of the perfect initiates” - there were just seven - was the term Rosicrucian advertised, together with a ludicrous story of its origin ⁽⁶²⁾ so as to obscure its objective of rooting out all Christian institutions and their forms of worship. The decisions from this meeting, also called “The Convent of Seven”, are found in “Themis Aurea” (1618) by Count Michael Maier of Rindsbourg, who was the physician of the Archduke and Emperor Rodolph II, and second successor to Fausto. In chapter IV he makes an interesting remark: *“Whoever shall travel, must profess medicine and cure gratis without any reward ...for a physician, in treating sickness, governs the emperor.”*

The true nature of Rosicrucianism: distasteful

It is the story of a legendary Christian Rosenkreuz, said to have been born in 1378, a memorable year to those Christ-haters. Then the papal head was spit in two, the French cardinals having elected an anti-pope. The year 1378 also refers to John Wycliffe in England, forerunner of John Huss (and symbolic of Luther), when he finished the trilogy of “De Ecclesia”, “De Veritate Sacrae Scripturae” and “De Potestate Papae”. The last one is noteworthy. In it, he denied in violent terms that the organisation of religious life had any foundation in Scripture and appealed to the government to reform the whole order of the church in England in opposition to the Church of Rome, which indeed happened in 1534 under king Henry VIII. The Peasants’ Revolt of 1381 magnified the affair, which Wycliffe had embraced. A great mob under the direction of John Ball, the mad priest, killed many people, including Simon of Sudbury, the Archbishop of Canterbury. The revolt had undertones too of revenge for the vehement suppression of the Knights Templar, which had happened more than 60 years earlier. A considerable number of Templars seem to have found refuge in Scotland coming from France. Scotland appears to have been an important region for the inception of Freemasonic thought (gnosticism). The Templars are supposed to have brought from the Arab lands, conquered by the Crusades, ‘the lost keys of the mystery cults’ (devil worship). With this kind of language Rosicrucianism finds itself at ease. 1378 is also the year of birth of Hieronymus of Prague (†1416), who brought Hussitism to Poland, its first major Protestant movement, which however was bloodily suppressed. Fausto settled permanently in Poland in 1580 and he continued, in a way, Hieronymus’ work. The fanciful Rosenkreuz is imagined to have died at the age of 106, and it was written that his light would only start to shine after 120 years (20x6), which brings us to 1604, the year of death of Fausto (1378 + 106 + 120).

Modern Freemasonry, into which Rosicrucianism evolved, may be defined as a school that seduces people on a slope from the least evil to the worst, so that the apprentice should be left in the dark as to its higher ends. ⁽⁶³⁾ At that important get-together ‘the invisibles’ decided to reveal themselves to the world after another hundred years had gone by, therefore in 1717. ⁽⁶⁴⁾ An organisation had to be set up for the occasion in a way not yet clearly defined. In course of time the idea ripened to use an already existing structure, which would be transformed to serve the means and purpose of the anti-Christian sect. The international association of Free Masons that

existed for the construction of cathedrals, appeared to be the ideal hiding place for the new organisation, which pulls the trick in a kind of coconut shell game.⁽⁶⁵⁾ And so it happened that in 1717 the Mother Lodge of London was inaugurated and, under a veil of respectability, presented to the world.

A true scientist knows God

Scientists, while unearthing and studying the laws of nature, are astounded at the grandeur of creation, and with clarity at their disclosure are filled with awe by the greatness and power of God's omnipotence. That is why a true scientist is never an atheist, investigating with his genius all the findings, he recognizes the great Creator with all his heart and soul. Hence, God seeing the development and intelligence of these creatures who search for a better knowledge of things and an amelioration of their short existence, will aid their efforts with his grace. But God also wants the perfection of their souls, thus leading them to a greater recognition of Him.

From the vision, Part 4, of the Russian Fanny Moisseieva – March 1928.

7.2 – Submitting the ‘Reason of God’ to the ‘Sovereignty of Man’

The inauguration of the Mother Lodge of London commemorated the year 1517 when on October 31st Luther nailed his 95 theses to the chapel at Wittenberg. This little piece of paper is



Luther

the birth certificate of the Protestant movement, in which Luther denounced among others the ‘selling’ of indulgences,⁽⁶⁶⁾ the proceeds of which were used at the time for the construction of St. Peter's in Rome. Now a different Cathedral had to be built, by master builders of an entirely different breed. Understandably, the Lutherans do not like to admit this connection, which is not of their choosing, but Freemasonry itself, in its own convoluted language, likes to express a different opinion. As already noted, the interpretation of an event is in the eye of the beholder. The abuses Luther denounced were very clear and would have been rectified anyhow. The issue at stake was greater –

and Rome understood. If we listen to the champion of the Roman Catholic cause, Louis Veuillot (1813-1883), that famous publisher of the French newspaper *L'Univers*, it concerned a clash of authority: the divine right of the authority of the Pope against the authority of the individual:

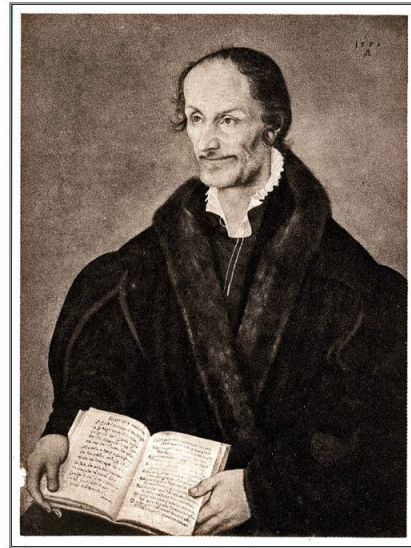
«« Proclaiming the right to free (Scriptural) inquiry, submitting the Reason of God to the Sovereignty of Man, giving to each individual the faculty or rather imposing on him the obligation to create for himself his own religion within the Biblical precinct, Luther denied the presence on earth of the divine authority (through the institution of Christ's Church on earth), by which he straight away opened the door to purely human religious (institutions). Because Reason appropriated the part that belongs to God in the moral direction of humankind, it had to remain the only master of our beliefs (and mystical inclinations),⁽⁶⁷⁾ teachings, the laws and our morals. »» (Mélanges II-2/185)

It was, however, Philipp Melancthon (1497-1560) who gave the doctrinal basis and structural set-up for the fulfilment of the Lutheran creed. Unlike Luther he considered philosophy and other profane disciplines to be of great value to theology. Without exaggeration, it can be said that he

was one of the most erudite and intellectually powerful figures of his age. He was born 14 years after Luther and died 14 years after him. He was the chief architect of the Augsburg Confession (1530) that fixed the points of faith and the organisation of the Lutheran congregation that was not an invisible church, as imagined by Luther, but a body of well-trained pastors and well-educated faithful. In addition to numerous Biblical commentaries he wrote a commentary on Aristotle, works on logic, rhetoric, philosophy and science, and he edited historical documents. He also initiated major innovations in the German educational system.

7.3 – The rise of science would have taken place anyway

One of the effects of the Reformation was to give an impulse to scientific inquiry based on the unshakable belief that reason could unlock the mysteries of life. There is some truth in the saying that modern science is the heritage of the Reformation, itself being an offshoot of Humanism, but it is completely wrong to say that without it the rise of science would not have happened. It would indeed have been preferable if the alternative course had been followed for that would have occasioned a two-pronged approach in which not only the rights of man but also those of God would have been given prominence. The Cathedral Schools, from which the universities sprang, was a gift to our world by the Church. The intellectual debate in those schools was lively and unfettered. The appreciation of the great capabilities of human reason and a strong commitment to debate, a promotion of intellectual inquiry and scholarly development – all sponsored by the institutions of the Church – provided the fertile soil for the Scientific and Industrial Revolution. To see an example of the initiatives of the Church towards human progress and happiness, see the Appendix.



Philipp Melancthon

In those early days of the scientific enquiry (16th and 17th century) the Roman Catholic Church exerted a stifling influence on the development of science as has been demonstrated by the vindication of Galileo Galilei (†1642), who was obliged to retract his statement, stated as a fact instead of hypothesis, that the earth revolves around the sun. The Catholic Church was too occupied with its own reform and with halting the assaults from Protestantism to be lenient towards a headstrong approach in science. In actual fact, most innovative ideas in the 16th and 17th century came from Protestantism, though some notable exceptions can be pointed out in figures like Pierre Gassendi (†1655), who was a Catholic priest and a close contemporary of Descartes. He played a crucial role in the revival of the theory that the world is made of small, indivisible particles and he rejected the Aristotelianism so characteristic of the period.

7.4 – Newton, the pivotal figure between the old and new ways

Our exploration of the emergence of the scientific mind terminates with Isaac Newton, the pivotal figure between the old-fashioned ways and early modern science. But he was not yet the scientist from our modern perspective. In the magnificent thirteen-part BBC television series ‘The Ascent of Man’ (1972), Dr Jacob Bronowski tells about Isaac Newton:

«« He always answered in the same terms: “*I do not make hypotheses*”, by which he meant: I do not deal in metaphysical speculation. I lay down a law, and derive the

phenomena from it. (...) Now if Newton had been a very plain, very dull, very matter-of-fact man, all that would be easily explicable. (...) He was really a most extraordinary, wild character. He practiced alchemy. In secret, he wrote immense tomes about the Book of Revelation. (...) William Wordsworth in "The Prelude" has a vivid phrase: "*Newton, with his prism and silent face*", which sees and says it exactly. >>>

The famous economist John Maynard Keynes (1883-1946) writes in his essay on Newton:

«« He was not the first of the age of reason, the first and greatest of the modern age of scientists, one who taught us to think on the lines of cold and untinctured reason, as in the eighteenth century he came to be thought of. No, he was the last of the magicians, the last of the Babylonians and Sumerians. (...) Isaac Newton, a posthumous child born with no father on Christmas Day, 1642, was the last wonder-child to whom the Magi could do sincere and appropriate homage. >>>

Nonetheless, this person marks the emergence of the scientific spirit. His greatest achievement was to clarify and to integrate the accomplishments of men like Galileo, Kepler and Boyle, and to produce a set of rules that provided a pedestal for modern physics and a structural approach for the larger field of science. His set of rules incorporated both logic thinking and experiment.⁽⁶⁸⁾ It had taken a long time before the philosophers - the future men of science - shrugged off their aversion against experiment, which goes back to the modes of antiquity.

The symbolic import of the rose and the cross

The alchemist Robert Fludd (1574-1637) gives in *Summum Bonum*⁽⁶⁹⁾ an expose on the meaning of the Rosicrucian symbol that then consisted of a small gold crucifix with, in its centre, a red rose. There are quite a number of meanings attached to a cross and the rose. That of Fludd is of interest because of his Socinian background. The year before he died, Fludd introduced the young Thomas Vaughan to the first principles of Socinianism, the same Vaughan whom the higher Freemasons admire profoundly and respectfully as the founding father of their movement. The cross would, according to Fludd, represent the wisdom of the saviour (Bon Iovi or Lucifer) and of perfect knowledge; the rose purification by means of ascetism that destroys the desires of the flesh. He said that it is the sign also of the Magnus Opus of alchemy. According to Serge Hutin (1927-1997), who was a high ranking Freemason and a prolific writer on the occult, it denotes the physical body of man, whereas the rose denotes the unfolding human soul. Jointly they represent the human condition in its relation to the Mysterium Coniunctionis, known to unite substance and essence, matter and conscience, body and soul. In this symbol we also recognize the hermeneutical cosmology. The cross - a masculine emblem - symbolizes in this view the divine creative energy that fertilizes the dark matrix of the primordial substance, symbolised by the rose - a feminine emblem - believed to have given birth to the universe. There are many designs based on the theme of both the rose and the cross. A commonly known example is the rose which Martin Luther devised as his personal seal. This does not prove he was Socinian, for the symbol predates the appearance of Socinianism. It might even be that the Socinians borrowed the emblem from Luther in whom they saw the initiator of the destruction of the Christian church. But afterwards they attached their own meaning to it.

The appearance of Newton coincided with the discovery here in the West of the mathematical tools without which modern science would be impossible. The mathematical voyage of discovery covered a time span of exactly one hundred years, from 1585 until and including 1684. The first tool was decimal fractions. The last, named differential calculus, was discovered by Newton

and Leibniz, each one independently.⁽⁷⁰⁾ Commonly, the beginning of modern science is placed in 1686 with Newton's publication of the Principia, in which the field of cosmology was elevated to the level of a disciplined science. Newton's greatest idea here, so it is said, was his proposition that the rules of nature are universal, whenever and wherever applied.⁽⁷¹⁾ Personally I am more inclined to place the beginning of modern science in 1684 when Leibniz presented differential calculus to the world, which was the last mathematical tool so essential for science.⁽⁷²⁾ These tools embedded in an experimental routine provide the backbone for our modern science. That routine follows a certain logic as developed by René Descartes (1596–1650), and this was now coupled with the systematisation of the scientific procedure, as formulated by William Gilbert (1544–1603) and Francis Bacon (1561–1626) ...and see, all was light! William Gilbert was the royal physician of Queen Elizabeth and her successor to the throne, but he is best known for his ideas on magnetism. Isaac Newton (1642–1727) used Gilbert's ideas to explain and calculate the astronomical motions.

Newton was a freethinker just like his scientific assistant. For many years that was John Theophilus Désaguliers (1683–1744), who was, as we have noted, the leader and highest initiate of the Socinians, later called the Rosicrucians, a group that practiced alchemy in its blasphemous application. Over a number of years this movement had succeeded in infiltrating the Masonic guilds and managed to reform them according to the precepts of Rosicrucianism, and then, in 1717, that momentous year, it presented itself to the outside world. We may safely say that Newton, the father of science as it came to be, was a Rosicrucian as well. We should not be surprised about the developmental path that science has taken ever since.

7.5 – William Gilbert versus Francis Bacon

In 1600 Gilbert published “De Magnete” that would appear to be the most important work on magnetism until the early 19th century. In it he concluded for the first time that the earth as a whole behaves like a giant magnet with its poles near the geographic poles. He also suggested that a vacuum exists between planets. The book was a huge success and is considered the first work to discuss the connection between magnetism and electricity. Despite the widespread use of nautical compasses, none of his contemporaries understood why compass needles behaved as they did: attraction, repulsion, variation, dip, bipolarity, and the determination of latitude were recognized empirically but poorly understood. On the whole we may say that Gilbert and Bacon made the necessary steps towards the modern scientific methodology. Bacon did not conceive the full potential of the mathematical description, neither did he grasp the intricacies of formulating a hypothesis, for which no clear-cut rules exist. He appears to have coined “knowledge is power”. He professed that religion has nothing to do with science, an idea already condemned by the Church in its dispute with the Averroists who preached the double truth, that of reason and that of revelation, while both fit into the same realm.

Early on in a scientific investigation an idea is postulated, often based upon an inspired insight. This is then translated into a tentative hypothesis by means of logical thinking. This process is called

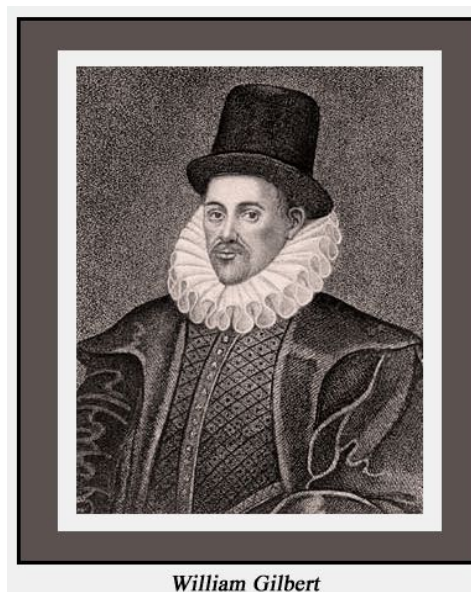


Francis Bacon

the inductive method. The practical consequences of the hypothesis must then be deduced mathematically and the idea tested experimentally. The successive steps were set out in Bacon's book "The Advancement of Learning", which was in several ways ahead of its time. It is unfortunate that Bacon was so little appreciative of Gilbert, as a careful analysis of his method might have guarded him from some errors. He not only failed to mention his considerable debt to William Gilbert, but also belittled him. He wrote in "The Advancement of Learning" :

«« Men have used to infect their meditations, opinions and doctrines with some conceits which they have most admired, or some science which they have most applied, and given all things else a tincture according to them most untrue and improper. (...) So have the alchemists made a philosophy out of a few experiments of the furnace, and Gilbert, our countryman, hath made a philosophy out of the observations of a lodestone. »»

Gilbert insisted on using empirical data rather than relying on past views. In "De Magnete" he shows many laboratory experiments, urging his readers to replicate. He assailed acceptance of myths such as the power of a magnet to detect adultery, rejected Aristotelian explanations, and invented the language to describe magnetic phenomena, including the terms electricity, electric force and magnetic pole. Like Bacon, Gilbert was weak in terms of the application of mathematics and any thought of the mechanical philosophy, but unlike Bacon his empirical work has been of lasting value. "When it came to science", Bertrand Russell wrote, "Bacon was wrong on almost every point. The great discoveries of his contemporaries were almost all rejected by him – even the circulation of the blood, discovered by his own physician, and these rejections were certainly not made in accordance with his precepts for inductive reasoning." ⁽⁷³⁾ Gilbert expressed himself as decidedly as did Bacon afterwards on the



William Gilbert

futility of expecting to arrive at knowledge of nature by mere speculation or by a few vague experiments. He says in the preface of his book: "To you alone, true philosophers, ingenious minds, who not only in books but in things themselves look for knowledge, have I dedicated these foundations of magnetic science – a new style of philosophising." His work contains a series of carefully graduated experiments, each one of which is devised so as to answer a particular question, while the simpler and more obvious facts set forth and their investigation led by orderly stages to that of the more complex and subtle conclusions. Gilbert has been called "the first real physicist and the first trustworthy methodical experimenter." ⁽⁷⁴⁾ Professor John Lienhard of Mechanical Engineering at Houston University, says in his audio 613:

«« William Gilbert honed the new logic of experimental reasoning. Francis Bacon usually gets credit for that, but he wrote about it twenty years later. Gilbert turned away from the old language and methods of the alchemists. The alchemists didn't like Gilbert one bit. But a pious young Johannes Kepler had been asking how the Holy Ghost went about moving the planets. He saw his answer in Gilbert: planets must exert magnetic forces on each other. Gilbert had led Kepler half way to Newton's gravitational theory. Galileo also read "De Magnete". He said: "I extremely praise, admire, and envy [Gilbert]." It ought to be said that Galileo wasn't often that kind about another scientist... »»

Notes

The numbering of the perfect initiates

(62a) "The numbering of the perfect initiates" took place at the "Convent of Seven" in the Schwartzfegerstrasse in Magdeburg, town that in 1547 proved to be the bastion of last resort during the Schmalkaldic War that threatened to overthrow the Lutheran movement, still trailing in its early pangs. One of the seven perfects, and the youngest, was John Amos Comenius, a leader of the Moravian Brothers, who were an offspring of the terrible band of fanatics, headed by the satanic John Ziska, who cried vengeance for the sentencing of the Bohemian John Huss (1415). When Huss was burned at the stake for heresy in Constance, Wycliffe's bones were ordered to be dug up and were burned at the same time (in England). Barbara Tuchman said: *"Even riddled by the schism, the Church was still in control."* Ziska's fury, however, was unabated. His barbarous army went out to exterminate any cleric it found on its way. Comenius, now, and most of his following, those distant sons of the Ziska's band, had to flee to Poland in 1621, because of imperial decree. Here in Poland closer bonds were forged with the Polish Brethren, a sect that had evolved as from 1600 into a stronghold of Socinianism. Comenius finally settled in Amsterdam, where he died in 1670. One of his lesser known works is "Lux in Tenebris" (Light in Darkness) that contains the visions of three persons from his entourage. This book clearly shows his occult leanings and Luciferian sentiments.

The importance of Wycliffe

(62b) Huss' followers themselves pointed at Wycliffe as their forerunner. Peter Chelsikky, an influential thinker who took part in the Taborite sedition under Ziska, wrote about Wycliffe:

«« None of the first doctors did so zealously speak or write against the poison poured into the Holy Church, out of which the greatest Antichrist has been born with all the loathsomeness with which he has oppressed Jesus Christ and His Law. Wycliffe has routed the hosts of Antichrist as well as those doctors who introduced cunning rules in the place of the Law of Christ. In this he pleases me above all others. »» ("The Political and Social Doctrines of the Unity of Czech Brethren" by Peter Brock - The Hague # 1957, p. 34)

Bibliography

(63) For further reading see Ch. 4 of "Freemasonry Unmasked" by the Apostolic Missionary to Sydney, the Irishman Mgr George F. Dillon # 1884. See also "Histoire Générale de l'Eglise" by Abbé J.-E. Darras # 1864-1881, as well as "Mémoires de Diana Vaughan" #1895, which latter has fallen out of favour because of the Leo Taxil case. She is, however, in conformity with the writings of Dillon, Darras and Mgr Gaston de Ségur, who lived in Grenoble, and wrote "Les Francs-maçons, ce qu'ils sont" #1867. See also Mgr Fava's "Le Secret de la Franc-Maçonnerie" # 1883, as well as those of Jules Doinel (a.k.a. Jean Kostka) in his "Lucifer Démasqué" # Febr. 1895. Before his conversion Doinel was part of the Council of the Grand Orient de France!

The invisibility of the highest initiates

(64) In September 1926 Captain William Morgan, a Royal Arch Freemason, was murdered by Richard Howard near the Niagara Falls, because he wanted to publish a book that exposed Freemasonry. I now quote William Carr (Satan, Prince of this World # 1966, p. 81):

«« Masonic records prove that when this repulsive fact became known in Masonic circles, a terrific reaction set in. Approximately 1,500 Lodges in the United States surrendered their charters. It is estimated that of the 50,000 Masons belonging to these Lodges, 45,000 seceded from the secret society. Thus it was that Freemasonry nearly died a natural death in America. But such is the power and influence of the Synagogue of Satan that today hardly a Mason with whom I have discussed this phase of their history, knows anything about it. I have copies of the minutes taken at the meetings which led up to this mass withdrawal from Masonry in America. These TRUTHS are not told by me to hurt Freemasons, but to prove conclusively that out of a possible 50,000 Masons, at least 45,000 didn't know or even suspect what goes on behind the scenes under the direction of Satanists, who hide like worms in the bowels of their and other secret societies. »»

Albert Pike, who in 1859 became the Sovereign Grand Commander of Freemasonry, decided to reorganize Freemasonry in order to prevent this kind of calamity to ever happen again. The affair of William Morgan proves that the invisibility of the true leadership and its evil acts should remain invisible. To reach that end Pike organized the "The New and Reformed Palladian Rite," (N.R.P.R.) that until this day contains the true leadership of Freemasonry. The ordinary Freemason knows very little about it. How many members it contains is anyone's guess. It is placed above the Grand Orient Masonry and the Illuminati. It is the top of the top and therefore stands above the highest 33rd degree, although its members may be 33rd degree members too. Palladism is in fact pure Satanism. With the peculiar form of Palladism, Pike restored the invisibility.

In this respect, it is of interest that Thomas Jefferson, the third President of the United States (1801-1809) who is pictured on the 2\$ bills and nickel coins, was murdered also in 1826, to be precise on July the 4th. His presidency was preceded by the very Christian John Adams. After a most severe battle with John Adams, Jefferson won the new presidency. Much later Jefferson and Adams became good friends, and Adams persuaded Jefferson to give his life to Christ. For two reasons this was considered high treason by the Freemasons: first because he had become a devout Christian (in name he was already a Christian), and secondly because he knew too much, being himself a highest ranking Freemason. So it was decided to kill them both at the same time, which they almost managed to do. When John Adams died on the West Coast his very last words were: *"Thomas Jefferson still survives."* Little did he realize that he actually outlived him by five hours, who lived on the East Coast in a time zone three hours earlier.



coconut shell game, or three shells and a pea

Coconut shell game

(65) The shell game, also known as thimblorig or three shells and a pea, is a confidence trick to perpetrate fraud. Have you ever seen the shell game being played? A guy sets up a table and puts three empty walnut shells on the tabletop, or coconut shells, depending on the region where it is played. He then puts a pea under one of the shells and moves them around very quickly while the naïve customer (the mark) stares at them intently, because he has just bet a sum of money. As the shells move rapidly back and forth, the mark loses concentration for a split second. Of course, when the moving around stops and he chooses the shell that he KNOWS has the pea under it, the pea is not there, and he loses the game. Distracting the customer is the means to winning the game.

The theology behind indulgences

(66) Indulgences were not meant to be sold, though in practice they often were. They were officially 'granted' under certain conditions for the reduction of the temporal effects of sin, known also as the remnants or vestiges of sin. Each sin is a grave offence against God's infinite majesty because it violates the splendour of his laws and natural order. Its forgiving is foremost the re-establishment of the friendship with God, but the temporal effects of sin remain and need to be repaired if possible, which is often not the case: the sin of murder may be redeemed but the victim will not come back to life. Each wrongdoing also has a perverting effect on the perpetrator, who after the forgiving of sins is still in need of inner cleansing. An important part in the economy of the temporal punishment is effected within the communion of saints. It should be stressed that this cleansing is obtained not without the infinite merits of the suffering of Jesus Christ. This is the teaching of the Roman Catholic Church. See Pope Paul VI's "Indulgentiarum Doctrina" # 1967, carefully written to avoid commercial overtones. Remarkably, St. Theresa of Lisieux (1873-97), since 1997 proclaimed teacher of the universal Church, at one time said to sister Febronia: *"Do you want God's righteousness? Then you will get God's righteousness! The soul gets exactly what she expects from God."* Part of the 'little way', she explains, is to have confidence in the caring love of God as the shortest way to heaven, for then purgatory will be unnecessary. How difficult it is to have such an attitude!

The return of Protestantism to their charismatic roots

(67) Protestantism witnessed in the 20th century the emergence and phenomenal growth of the Pentecostal, Charismatic and Neocharismatic movements. These three waves of Pentecostalism, which constitute one of Christianity's greatest renewals, have impacted every segment of the church in virtually all countries of the world with new vitality and fervour. Participants in this renewal share exuberant worship, and emphasis on subjective religious experience and spiritual gifts, claims of supernatural miracles, signs, and wonders – including a language of experiential spirituality rather than of theology – and mystical "life in the Spirit" by which they daily live out the will of God. Since the 1960s there has even been talk of the Lutheran charismatics as well as of the Catholic Charismatic Renewal. (Taken from the introduction and content of the "New International Dictionary of Pentecostal and Charismatic Movements" by Zondervan Publishers # 2003.)

The early tradition of experimentalism

(68) Newton was not the first to verse himself in experiment. Leonardo da Vinci, who lived 200 years earlier, was nothing but experiment. The Englishman Robert Boyle, a senior to Newton, is to be considered the supreme experimentalist of his era. Already Stevin and Galileo, who lived at the turn of the 16th century, thought along experimental lines. The first to seriously propose experiment for the advancement of learning was, in the 13th century, the Franciscan Roger Bacon but his influence was slight.

Summum Bonum

(69) Summum Bonum replies to an attack by Father Mersenne aimed at Fludd's belief in the Rosicrucian ideals. The book treats «The noble art of magic, the foundation and nature of the Cabala, the essence of veritable alchemy, and the 'Causa Fratrum Roseæ Crucis'». There is a long exposition on the significance of the rose and the cross. The book was printed in 1629 in Frankfurt under the pseudonym of Joachim Fritz. If not Fludd's, it was the work of a friend. In either case, his opinions are represented as he would have liked to have introduced Rosicrucianism to the outsiders.

Leibniz, the inventor of calculus, and his successor

(70) Gottfried Leibniz discovered calculus during 1673-1676, independently and shortly after Newton, presenting his findings in "Differential Calculus" in 1684. Newton first published his system in 1711. Newton's calculus was flawed, but worked because of two compensating errors, which led Leibniz to say of his disciples that they were *'men more accustomed to calculate rather than think'*. Leibniz was the true pioneer of systematic logic, but we had to wait for the English philosopher and mathematician George Boole to formulate a universal system of logical

operations, which has become the basis of all computer logic. Only two treatises on mathematical subjects were completed by Boole during his lifetime. The well-known “Treatise on Differential Equations” appeared in 1859 and was followed, the next year, by “Treatise on the Calculus of Finite Differences”, designed to serve as a sequel to the former work. Boole’s work was extended and refined by a number of men, like William Stanley Jevons, who invented the “Logic Piano”, a mechanical computer built in 1869. In 1938 Claude Shannon showed how electric circuits with relays were a model for Boolean logic, which soon proved consequential with the emergence of the electronic computer.



The Logic Piano

Why the rules of nature are universal

(71) Newton’s great idea was the proposition that the rules of nature are universal, whenever and wherever applied. If true, which by now has been sufficiently proven, this proves at the same time that both space and time are infinite. Because of their infinity (discrete moments or Planck times, are infinite in both directions), each point of space at a particular Planck-moment is the midpoint in space, which is the essential requirement for the laws of nature to be equal, whenever and wherever applied, for it is the (invisible) mathematical web of geometrical relations that determines the rules of the game. And each point can only be a midpoint if each point is within limitless space, for limited space only contains one midpoint.

An exact date for the beginning of modern science

(72) Michael White selects still another date for the beginning of modern science. He says that “if the arrival of the modern scientific age could be pinpointed to a particular moment and a particular place, it would be 27 April 1676 at the Royal Society, for it was on that day that the results obtained in a meticulous experiment (as proposed by Newton) – the so-called *experimentum crucis* – were found to fit with the hypothesis, so transforming a hypothesis into a demonstrable theory.” See: “Isaac Newton, The Last Sorcerer” by Michael White - Fourth Estate Ltd, London # 1997 (p. 188). White is known for a number of biographies on famous scientists, including Einstein, Darwin and Galileo.

Since 1645 there has been an association in London whose members held discussions on the possible ‘workings’ of nature. Their opinions were far from what we nowadays would call science, or even the beginnings of science. From this private initiative the Royal Society was born, an institution still known as the Invisible College during the Civil War, a name that – on the one hand – indicated the forbidden character of the group and – on the other – the alchemy practised by its individual members. As we saw in the Convent of Seven, the alchemist Rosicrucians, alias the perfect initiates, called themselves the ‘invisible ones’, a code name for alchemists. After the restoration of the English monarchy in 1660 the group became a renowned college, raised by royal decree in 1662 to the status of “The Royal Society of London for the Improvement of Natural Knowledge”. It is particularly thanks to Newton that the Royal Society was able to put aside its reputation for mediocrity and dilettantism.

(73) “Collected Papers of Bertrand Russell: Last Philosophical Testament 1947-1968” edited by John G. Slater with the assistance of Peter Köllner # 1997 (p. 215).

(74) “Geschichte der Atomistik” by K. Lasswitz # 1890 (Part 1, p. 315).

APPENDIX

How a King Stamped out the Contribution of the Church

From: [How the Catholic Church Built Western Civilization](#)
Chapter 3: [How the Monks Saved Civilization](#)
By: [Thomas E. Woods Jr, Ph.D.](#)

Regnery Publishing, Washington DC # 2005 (pp. 37-38)

Richard of Wallingford, a fourteenth-century abbot of the Benedictine abbey of Saint Albans and one of the initiators of Western trigonometry, is well known for the large astronomical clock he designed for that monastery. It has been said that a clock that equaled it in technological sophistication did not appear for at least two centuries. The magnificent clock, a marvel for its time, no longer survives, perhaps having perished amid King Henry VIII's sixteenth-century monastic confiscations. However, Richard's notes on the clock's design have permitted scholars to build a model and even a full-scale reconstruction. In addition to timekeeping, the clock could accurately predict lunar eclipses.

Archæologists are still discovering the extent of monastic skills and technological cleverness. In the late 1990s, University of Bradford archeometallurgist Gerry McDonnell found evidence near Rievaulx Abbey in North Yorkshire, England, of a degree of technological sophistication that pointed ahead to the great machines of the eighteenth-century Industrial Revolution. Rievaulx Abbey was one of the monasteries that King Henry VIII ordered closed in the 1530s as part of his confiscation of Church properties. In exploring the debris of Rievaulx and Laskill at an outstation about four miles from the monastery, McDonnell found that the monks had built a furnace to extract iron from ore.

The typical such furnace of the sixteenth century had advanced relatively little over its ancient counterpart and was noticeably inefficient by modern standards. The slag, or byproduct, of these primitive furnaces contained a substantial concentration of iron, since the furnaces could not reach temperatures high enough to extract all the iron from the ore. The slag that McDonnell discovered at Laskill, however, was low in iron content, similar to slag produced by a modern blast furnace.

McDonnell believes that the monks were on the verge of building dedicated furnaces for the large-scale production of cast iron – perhaps the key ingredient that ushered in the industrial age – and that the furnace at Laskill had been a prototype of such a furnace. *“One of the key things is that the Cistercians had a regular meeting of abbots every year and they had the means of sharing technological advances across Europe”,* he said. *“The break-up of the monasteries broke up this network of technology transfer”.* The monks *“had the potential to move to blast furnaces that produced nothing but cast iron. They were poised to do it on a large scale, but by breaking up the virtual monopoly, Henry VIII effectively broke up that potential.”*

Thomas Woods refers to: [“Henry Stamped Out Industrial Revolution”](#) (Telegraph U.K., June 21, 2002) and to [“Henry’s Big Mistake”](#) (Discover, Febr. 1999).

The Ascent of Man and Science *in confrontation with the* *Mysterium Coniunctionis*

***Introductory note:** After having discussed how the Renaissance spirit molded primitive science, we are now going to discuss the ideas that have had far-reaching effects on science as it came to be. In these final four sections we will discuss the alchemical premises that have knitted the straitjacket of our modern scientific routine, which can be blamed for many of the unfortunate developments that have plagued our society. If we talk about alchemy, we talk about Satanism, as it was practiced by the highest initiates. The persecution after that ill-fated meeting in 1546, made that the highest initiates were seeking refuge elsewhere. Poland became the new base of operation, where they were called Socinians, and from there it dispersed over the whole world.*

‘Wanderings of the Socinian-Alchemists’ (8) (16th and 17th century)

8.1 – The Polish throne became a target of machinations

The persecution of religious dissidents in the 16th century is invariably blamed on the bigotry of the Church and its dictatorial intolerance towards freedom of expression. As a human institute the Church on earth has its shortcomings, sometimes great shortcomings. But had not the Church every right to defend itself against attacks from unscrupulous beings whose arrows not only hurt the Church, but threatened to tear apart the whole fabric of society? How indecent to blame the Church for all the disasters of the 16th century! It was the Church’s holy duty to defend itself against the Antitrinitarians or Unitarians, and more in particular the Socinians who often pretended just to be Unitarians, who the new Protestant sects abhorred once they perceived what they were up to.

These heretics were engaged in the baneful art of magical alchemy, and were a real danger. They were tirelessly plotting out of a burning desire to destroy our Western Christian heritage, while pretending to stand up against the Roman Catholic Church ‘only’, and this sentiment still reigns in their offspring. They – the Freemasons – are happy, now at the beginning of the 21st century, to use militant Islam as the hammer to destroy our Western Christian heritage! Despite a wide variety of movements and opinions, these haters of Christians were all after the same end, namely the uprooting of the budding Kingdom of God on earth. One consolation is that the mystery of the lawlessness under the ægis of Freemasonry seems, now in our times, to have reached its apogee and is near its downfall.

The authorities were vigilant. Faustus Socinus’ life was in peril. Italy, France and Switzerland had become hazardous territory to the radical reformists. Even Protestant Germany proved no safe haven. Socinus was obliged to seek residence elsewhere. Poland seemed a good alternative. As early as 1551, on one of his many travels, Lælius Socinus visited Poland. He must have been thrilled that many of his ideas were being discussed there, ...not openly, for the power of the

Roman Catholic Church was too strong. He briefly visited Kraków, at that time the capital of the country. He felt at home, for it had become a centre of Italian renaissance culture under the auspices of queen-mother Bona Sforza.⁽⁷⁵⁾ In Kraków he met Francesco Lismanini, an Italian Franciscan, who came under his influence. In 1553 he left the Church and, being the confessor of the Queen he advised her to do the same, but she refused. Six years later Lælius visited Poland again. He was received with honours after having presented letters of introduction from amongst others Calvin.

This course of events was made possible because the Polish king Sigismund II (1548-1572) was looking for ways to reform the religious landscape of his kingdom along Protestant lines, thereby pursuing a course different from that taken by his predecessor under the influence of his mother. The Bohemian Brothers, a branch of Hussite extremists, seized the opportunity, and, as from the year of Sigismund's accession, started to seek residence in Poland. They later merged with the Unity of Czech Brethren, also known as the Moravian Brethren, of which Comenius happened to be their last leader; he went to Poland in 1624 at the age of thirty-two. Under Sigismund's reign the Calvinists were allowed to convene their first synod in Słomniki, most of their members coming from the nobility. That was in 1554. Four years later the Lutherans were granted full freedom of religion by the king. They, however, predominated among the middle-class town dwellers.

After the death of the heirless king in 1572, the Polish throne became a target of machinations. This resulted in the famous "pax dissidentium", thereby giving the Protestants not only freedom but also legal equality with the representatives of the Roman Church, though the relation between the nobles and their serfs remained unharmed. At his accession to the throne in 1573, the successor King Henryk felt obliged to promise by solemn oath to support religious liberty by means of the so-called Henrykian Articles, that had been formulated for the occasion. This made Poland, together with Transylvania (Romania) adopted similar laws in 1577, the most liberal country in the world.⁽⁷⁶⁾ No wonder that in 1580 Fausto decided to take up residence in Poland.

8.2 – *Fausto gained ascendancy in Poland*

Fausto found in Poland a religious setting that appealed to his predilection, the soil having been tilled by Lælius and the like (Blandrata, Alciati and Gentilis). During the Polish Antitrinitarian Synods of 1584 and 1588 he gained ascendancy, but he was not officially admitted to the Polish Brethren for about twenty years because of differences of opinion. Fausto was, like his uncle, courtly in manners, with a profound culture, and easily made friends. He rarely expressed his deepest convictions and was a good listener. His method of inquiry was like Lælius, who in the form of letters asked for opinions of prominent teachers rather than writing his own thoughts. Only afterwards he took a position that slightly disagreed with his interlocutor.⁽⁷⁷⁾ In his old age, however, he lost his habitual prudence, which caused him no few problems. After the Polish Brethren accepted Fausto in 1596 as their paterfamilias, he decided to publish a collection of his lectures under his own name. This caused such an outrage that university students invaded his apartment and dragged him half-naked to the city hall where his books, papers, and correspondence were burned. In the nick of time a university professor prevented his drowning in the River Vistula.



Fausto Socinus

Fausto remained associated with the Polish Brethren, also called Unitarians, for the rest of his life. He participated in their synods and eventually became their leading theologian. His major role was in the unification of the various tendencies. Only at the end of his life was he admitted by the Polish Brethren to the common celebration of the last supper. He could thus say that he never was a head of any separatist movement and could not be called a heresiarch. We know better! In 1600 he was invited to Raków where he attained a commanding position while providing the printing press with a stream of manuscripts that were disseminated abroad. Not long after Fausto's death in 1604, they incorporated his teachings into their official doctrine, and from then on they also called themselves Socinians. These Socinians, who as a group professed a milder doctrine – and milder as time went by, should be distinguished from the extremist Socinians who in 1617 founded the Order of the Rosie Cross. The confusion this caused in people's minds must have been welcome to the inner circle. All the while, the centre at Raków, dubbed the Sarmatian Athens, continued to fill Europe with treatises that were written in Polish, Latin, Dutch and German. More than 500 titles appeared until its end in 1638. They were praised by people like John Locke, John Stuart Mill, and Isaac Newton.

Fuelled by a burning desire to destroy our Western Christian heritage

...and this is the exact sentiment that still reigns in its offspring. The Freemasonic movement is that offspring. We have traced back its beginnings to the Collegia Vicentina of 1546 in the Republic of Venice. After the strangling of two scoundrels the other conspirators had to flee the republic. Abbé Lefranc says in "Le voile levé" #1792 that, in fear, Lælius and Darius Socinus, Bernardino Ochino (vicar general of the Capuchin order, 1539-41), Francesco di Nero, Iacob Chiari, Gianpaolo Alciati, Valentino Gentilis, a certain Peruta as well as abbot Leonardo, scattered over Europe, and he tells that this was one of the reasons why their ideas spread so quickly. We should not fancy that their ideas were new. In detail and ambition perhaps, but its inspirational sources are much older. Says the apostle Paul (2 Th. 2:7): "*The Mystery of Lawlessness is already at work.*" Its better known exponent in that early age is Valentine who was, according to Irenæus of Lyons (1st 2:1), the first one who managed to import the teachings of the "Gnostic Heresy" (of Simon the Magician) into a philosophical system. This became known as the Valentinian Doctrine or the Egyptian Gnosis, of which elements are found in all the heretical teachings, be it Manichæan, Templar, or whatever. Not surprisingly, this shows clear links with the Masonic creed. The initiator of the Valentinian Doctrine makes his appearance as Simon Magus in Acts 8, a figure treated at length by Irenæus in his book "Heresies" (1st 23), which is partly based on the commentary of Justin Martyr (Apol. 1st 26 and 56, 2nd 15; Dial. 20). The Jew Valentine sat at Simon's feet. It is accepted that the teacher Theodas, mentioned by Valentine, is the same as Simon Magus. Gnosticism has, under a cloak of Christianity, many appearances. In spite of the diversity, they follow the same object, which is the destruction of the nascent kingdom of God on earth and the bringing to naught of the Christian heritage of our societies. Finally, in our times, the Mystery of Lawlessness appears to have reached its apex under the vast Masonic umbrella.

8.3 – Socinianism was at the inception of liberal rationalism

The 'official' Socinian doctrine has been in a state of constant flux, so that we can rightfully ask: "What is that precisely?" There is a great difference between the secret doctrines held by the inner circle of its leaders and those intended for the laity, as appears to be the case with "The Racovian Catechism", to a large extent written by Fausto and published the year after his death, first in Polish. From "The Catholic Encyclopedia" of 1912 (Vol. 14) we learn that, interestingly, the condemned propositions of Peter Abelard (†1142), who is considered a precursor of Free-

Thinking and rationalism, might stand for those of the Socinians. The same holds of the Waldensian heresy: the Profession of Faith drawn up against it by Pope Innocent III might be taken as a summary of Socinian errors. The first formal condemnation of Socinianism appears in the constitution of Paul IV issued in 1555: “Cum Quorundam”, confirmed in 1603 by Clement VIII in “Dominici Gregis”. From these publications it would appear that the Socinians held in 1555, and again in 1603, that there is no Trinity; that Christ is not consubstantial (the same in substance) with the Father and the Holy Spirit; that He was not conceived of the Holy Spirit, but begotten by Saint Joseph; that His Death and Passion were not undergone to bring about our redemption and finally, that the Blessed Virgin is not the Mother of “God”, neither did she retain her virginity. ⁽⁷⁸⁾

In our times, the Unitarians – who are an offspring of Socinianism – do not dwell much on these points of faith, but like to stress their supposedly great contribution to society because of their notion that religion should strictly and excessively follow the principles of reason and religious tolerance. They developed the idea, so they say, of the absolute separation of church and state (another excess) – which proved so disastrous for the development of society – to which Fausto’s successors in the church movement, beginning with John Crell, devoted a great deal of attention. They proudly claim that Socinianism was at the forefront of the liberal and rationalistic tradition so typical for the period of the Enlightenment – which has brought us so much evil and which we should not be proud of.

8.4 – Hosius left nothing undone

Protestantism in Poland was making great strides. In 1611 only a quarter of the population of the about 15 million people would still be Catholic. The reader might get the impression that the Roman Church obediently bowed. Such was not the case. Of the 4,000 Catholic churches that were in the hands of the Protestants, many came back in Catholic hands. In the end, as it turned out, Catholicism prevailed. In an article less than favourable to Catholicism, I found: “*Cardinal Stanislas Hosius (1504-1579) was the single individual who contributed most to the defeat of the Reformation in Poland.*” I agree. He was one of the great men of his age, described by St. Peter Canisius as the most brilliant writer, the most eminent theologian, and the best bishop of his time. He was more. He was also a man of prayer and mortification and he showed great generosity towards the poor. Bishop Hosius took possession of the Diocese of Ermland in 1551, three years after the progressive Sigismund ascended the throne. From the start Hosius devoted all his energies to the maintenance of the Catholic faith. His great learning and wide experience made him the natural leader of the Polish episcopate in its struggle against Protestantism. For the first seven years he served the cause chiefly by his numerous polemical writings, of which the most famous is his (expanded) “*Confessio Fidei Catholicæ Christianæ*”, which initially served as a test of faith. In faultless Latin the author places the whole array of doctrines of the faith in contrast with the opposing views of the reformers and proves by means of irresistible logic, drawn from Holy Scripture and patristic literature, that Catholicity is strictly identical with Christianity. The work became so popular that 32 editions of it were printed during his lifetime, and translations appeared in many languages. Besides his writings in defence of Catholicity, Hosius left nothing undone to gain the co-operation of King Sigismund and the bishops. The king, however, as well as many of the bishops, remained inactive. In 1558 Hosius was called to Rome, but he remained involved. In 1565, Hosius, then cardinal, brought in the Jesuits to take over education. This was an important step. Slowly the Order spread all over Poland and was endowed with churches, hospitals and schools.

When, in 1573, Henry III (Henri of Valois) had taken over the throne, the cardinal argued that the Pax Dissidentium was a criminal conspiracy against God and should be abolished. He openly

recommended to the king that the oath to obey the so-called Henrycian Articles was an oath given to heretics and might therefore be broken without fault, even without a priestly absolution. Not much happened; in just more than a year after his coronation, Henry fled to Paris to succeed his brother to the throne who had died childless. In Poland he was succeeded by Stefan Batory.

Beginning with the reign of Batory (1575-86), the clergy and Jesuits launched a carefully planned campaign against Protestantism, aimed in particular against the diabolically inspired Socinianism. In course of time the struggle became more pronounced. In 1611, at Wilno, a young Italian named Franco shouted that the Eucharist was nothing but idolatry and when he did not retract, he was condemned to death and hastily executed for fear of insurrections. That same year in Bielsk, in what was thought a concerted action, a Socinian, one Jan Tyszkiewicz, was executed because he refused to swear in the name of the Holy Trinity. We should bear in mind that the Socinianism of its leaders was devil worship under the pretext of alchemy – which was not so of Socinianism in general. As creeping chameleons they ventured in the religious landscape. This idolatry was on a par with a burning hatred against the Roman Catholic Church and, in the final resort, anything Christian. That hatred did not escape notice, though cleverly veiled under a deluge of words and the pretence of piety. It was not just a theological dispute. It went much deeper. It was about the way of government. It was about power. As government and religion were interwoven, Socinianism was recognized as an attack on the state. The Hussite bands of religious fanatics, who, two hundred years before, had roamed Bohemia with destruction and bloodshed, and anguish in their wake, had not been forgotten. Neither was their sacking of Prague in 1419. In a total inversion of values the Hussite cause has been called *“the sacred cause of God’s light and truth against the Devil’s falsity and darkness.”* ⁽⁷⁹⁾

8.5 – The dedication of Poland to the Queenship of the Mother of God

Near the end of the 45 years of kingship of Sigismund III the Jesuits managed to gain control of the whole field of education, which set the stage for the final act. Sigismund was succeeded in 1632 by his son Ladislaus IV. Under his reign the Senate ordered the abolition of the Socinian church and destruction of the school and printing facilities at Raków. Moreover, it prohibited the restoration of the school under penalty of death. In the process, the Catholic son of the aged founder of Raków accused his own father! Yet, the *pax dissidentium* agreement was not to be revoked until the complete success of the Counter Reformation, twenty years later. It was certainly not just because they held dissenting views that such harsh measures were taken. The Socinians were accused of sacrilegious practices. These are enumerated in a pamphlet from 1638 that pointed out that they had a scandalous book on their printing press, called *“Tormentum Throno Trinitatem Deturbans”* (the tearing down of the lamentable torture device of the Holy Trinity). The investigation started after pupils of the school at Raków were seen to pelt stones at a wooden cross, being taught to do so by their teacher.

The Jews were left untouched who, everyone knows, do not believe in the Holy Trinity. They were treated with kindness. They had their Yeshiva (school) and a printing house. In 1632 Ladislaus forbade anti-Semitic works and in the year following he forbade Christians from entering Poznan, their city. By the time the king died, the Jewish population of Poland had reached 450,000, representing an estimated 60% of Jewry worldwide. Poland became the home to Europe’s largest Jewish population, as royal edicts guaranteeing Jewish safety and religious freedom from the 13th century contrasted with bouts of persecution in Western Europe, especially following the Black Death of 1348-1349, blamed by some on the Jews themselves. Much of Poland suffered relatively little from the outbreak, while Jewish immigration brought valuable manpower and skills to the rising state.

Ladislaus died in 1648, just before the outbreak of wars that culminated in The Swedish Deluge (as from 1655), at the end of which the country was left devastated and one quarter of the population had died, mainly through famine, epidemics and the cruelty of mercenary soldiers. The Swedish Deluge, that devastated Poland from 1655, had clear undertones of religious strife. The Lutheran belief was all-powerful in Sweden and clashed with the legitimate aspirations to the Swedish throne of the Roman Catholic kings, reigning in Poland. There was a remarkable event. Queen Christina of Sweden (1626-89) had to abdicate in 1654 because of her conversion to Catholicism. This conversion was certainly not due to the care of her tutor, the sister of the real regent (when Christina was minor), the Chancellor Axel Oxenstiern (†1654), who - to be expected - was a dedicated Lutheran.

The confidant of Oxenstiern was the Dutch entrepreneur and arms dealer, the celebrated father of Swedish industry: Baron Louis De Geer. His house in Amsterdam, called 'with the heads', situated at the Keizersgracht 123, still exists. The six heads on the outer façade are an eulogy to paganism, and represent Apollo, Ceres, Mars, Minerva, Bacchus and Diana.⁽⁸⁰⁾ He participated in the Convent of Seven in Magdeburg in 1617! That year he lent a considerable sum to the Swedish king, and ever since he maintained a close connection with him. The Great Adolphus (†1632), king of Sweden, became one of the major players in the Thirty Years' War (1618-48). Though Oxenstiern disapproved of his engaging in it, he continued to support the king with great ability. During the Hannibal War, also called Torstensson War, De Geer singlehandedly equipped an armada to sail to Denmark in October 1644, which shows his immense fortune. It seems unlikely that the Swedish king knew about De Geer's Socinian affiliation. This terrible person, who had died in 1652, was obviously a warmonger. He made a colossal fortune thanks to the current wars. It not only served his pecuniary interests, but also De Geer's uncompromising hatred against God and his Church, which he wanted to annihilate.

For sure, the Swedish involvement in the Thirty Years' War brought much harm to the Roman Catholic cause, and though it is unlikely that the Polish king knew about De Geer's Socinian affiliation, it is not totally unlikely, for the Church has its own ways of getting at the truth.⁽⁸¹⁾ Whatever, at the camp near Warsaw the Jesuits seem to have convinced the king that it was necessary to chase the Socinians out of the country by means of a solemn vow to God. Ladislaus was succeeded by his half-brother John Casimire. In utter distress, King Casimire took a vow at the beginning of 1656. All seemed lost. He pledged in the Cathedral of Lwów (now Lviv in the Ukraine), with great ceremony and in front of the altar of 'Our Gracious Lady', that he would be loyal to God and he dedicated Poland-Lithuania to the Queenship of the Mother of God. He also promised to remove the grievances of the different classes. Shortly afterwards, the king repeated the vow at the camp near Warsaw, promising this time to expel the Socinians from Poland, who were considered the cause of the mischief that had befallen Poland.

After his victories, the king proceeded to fulfil his vows. To express in deeds his gratitude to God, on July 20th 1658 the Senate expelled the Socinians from Poland. A peace treaty was signed with Sweden in May 1660, after which both countries returned to their pre-war frontiers. The Senate also enacted a law prohibiting, under the penalty of death, profession or propagation of Socinianism in the Polish dominions. Any Socinian who did not embrace Roman Catholicism had to leave the country by mid June 1660, again under the penalty of death. This law was explicitly intended to fulfil the king's vow to dedicate Poland to the Holy Virgin. The indictment of 1424 by Vladislav Jagiellon against the Hussite heretics was cited as a basis for the decree. And for this reason the Socinians fled to Amsterdam and made that city their headquarter. A number of them also scattered to other regions like North America, where they are still known as the Unitarians. There, they forged ties with the Puritan families, notably in Boston and Charleston/Charles Town (South Carolina), who subsequently were helpful in bringing Free-

masonry to the continent and have been involved to this day. In the early days Charles Town was reknown for its slave trade and Boston amassed wealth with the opium trade. They also went to Prussia and England as well as Transylvania, although the Sabbatarians, who followed an extreme form of Unitarianism, had been severely persecuted there, already since 1638, after Prince György Rákóczi, of Calvinist creed, instigated a sort of inquisition.

Executed because he refused to swear in the name of the Holy Trinity

Why such a fuss about Antitrinitarianism? Devil worshippers hate the Holy Trinity. Its invocation releases so much power! Every Roman Catholic exorcism begins with the invocation of the Holy Trinity: the Father, the Son and the Holy Ghost. Let them tremble! Antitrinitarianism is their way to freedom (to do evil). The next step during an exorcism is a reading of excerpts from the Bible before a kind of dialogue sets in between the exorcist and the possessed person, in which the exorcist asks for the name of the demon. A name is not just a sound. A good name tells something about the owner. It is listened to and can be used to address that person in his deepest being and there, in that place, to impose a will. So, asking the name of a demon is always a crucial and difficult moment. Evil never wants to reveal itself and fights back to prevent its true identity from being known. It often lies about it. The name Jesus means “God saves (from the demoniacal condition)”. That is not something a demon wants its name to be confronted with. Therefore no demon ever wants to say its name. This stratagem of concealment has always been followed by the Socinian masters and their offspring. To disclose the true nature of Socinianism, hidden behind names like alchemy, Order of the Rosie Cross and Freemasonry, is kind of awkward. I fear this aspect will bring great criticism. There is no other way. Naming its name – Satanism – is essential, for God’s sake, for Jesus’ sake, in order to exorcise the world of this pest.

8.6 – The Socinian scourge comes to Holland

According to the autobiography of Diana Vaughan (pp. 164-65), who knew her ancestor’s diaries, Thomas Vaughan, then head of the Rosicrucians – until his death in 1678 (not 1666) – decided to make Amsterdam its headquarter in view of the many Polish Socinians who were finding refuge there, but also in view of the mounting resistance Royalists against the macabre Cromwell, and therefore England was not an option. After the Glorious Revolution of 1689, they moved to London, to later institute the Masonic Mother Lodge, at the date set far in advance by the Convent of Seven. In England and Scotland with their ancient occult tradition, the perfidious sect found its habitat. Some time after the American Civil War, the headquarter moved again, but now to Washington D.C.

Vaughan started to work in 1656 for the publication of a large series called “Bibliotheca Fratrum Polonorum quos Unitarios vocant, instructa Operibus omnibus Fausti Socini Senensis”, or the BFP (Library of the Polish Brethren, also called Unitarians, explaining all the works of Faustus Socinus from Siena [and three others]), the first being printed in 1665 by Daniel Bakkamude, who made a fortune because of this and other works of the kind. The first two works of a total of ten, pertain to Fausto. These were co-edited by his grandson Andrew Wiszowaty. In spite of the tolerant spirit prevailing in the Netherlands, it had to be printed clandestinely. Thus Amsterdam, the town of its publication, was written: “Irenopoli, Post annum Domini 1656”, or “town of Eirenæus as from 1656”, or in a different case: “Eleuteropoli: sumtibus Irenæi Philalethii”, which could be “town of E. Leuthor (alias for Eugenius Phila-Lethes), edited by Eirenæus

Philalethes.” This obfuscates the fact that Eirenæus Philalethes is the same as Eugenius Philalethes alias Thomas Vaughan, an issue on which much confusion exists.

Holland was known for its tolerance. This remained its hallmark ever since but not a tolerance without bounds. In the year Casimire vowed to chase away the Socinians, the Dutch States General issued a prohibition against printing Socinian literature; ⁽⁸²⁾ generally, Socinianism was viewed to be unbelieving, which was a serious allegation. Obviously, the prohibition was not felt as an incontrovertible impediment. Although the real Socinians were few, their super-rationalistic spirit took hold in large circles, and especially amongst the nobility. Astutely, the Socinians had found in Helvetius, the appointed physician of the ‘Child of State’, William III, a good friend in high places. They also found a protector in the Grand Pensionary Johan De Witt, who, as from 1653, was the highest magistrate in the country. He fully shared their blasphemous persuasions.



Oliver Cromwell

This does not mean everyone agreed. In Pierre Bayle’s encyclopedia it is all too evident that the Socinian sect was feared in Europe. Many princes were said to favour it secretly, and it was predicted that the sect would overrun Europe. Bayle, however, dispels these fears by dwelling upon the steps to prevent its spread. He mentions that in 1639, following the measures against Raków, at

the suggestion of the British ambassador, the States of Holland were advised of the possible arrival of Socinians. He tells that afterward very stringent decrees were passed against them, in particular that of the year 1653. An example of an edict against Socinianism is from 1674, issued by the ‘Hof of Holland’ subsequent to the Synod of Dordrecht. The Edict was published in the “Groot Placaet Boeck” ⁽⁸³⁾ and the translation here is from Nynke Leistra:

«« Having learned that for some time several Socinian and other harmful books have been published by way of printing and are still daily being spread and sold, as there are those entitled Leviathan, Bibliotheca Fratrum Polonorum, and also Tractatus Theologico-Politicus. And finding, after examination of the contents of these that they not only deny the doctrine of the true Christian Reformed Religion, but also abound with all calumnies against God and his Qualities and His Trinity worthy of admiration, against the divinity of Jesus Christ and his atonement, as well as the fundamental tenets of the said true Christian religion, and that they, in effect, try as much as they can to render the authority of the Scriptures contemptible and attempt to confuse weak and unstable minds, all directly against repeatedly issued resolutions and edicts of the country. Thus, in order to restrain this harmful poison [tot voorkominge van dit schadelijck Vergift] and in order to prevent as much as possible that anybody shall be misled by this, we have judged it our duty to declare the said books to be as we deemed aforesaid and to condemn them as blasphemous, pernicious to the soul, full of unfounded and dangerous propositions and abominations, detrimental to the true religion and divine worship. Therefore, we herewith as yet prohibit each and everyone to print, to spread or to sell these or similar books on auctions or otherwise, under penalty of the edicts of the country and especially that of Sept. 19th 1653, which has been issued to this end. We order anyone whom it may concern to comply with this (edict) to be published and posted up everywhere where it should be and is customary in similar matters. »»

Notes

The thrones of Sweden and Poland

(75) Bona Sforza (1494-1557) was a member of the Milanese Sforza dynasty. She became Queen of Poland and was the second wife of King Sigismund I, 'the Old'. Her only surviving son, Sigismund August Jagiellon became king of Poland. A few years after her brother's death Anna Jagiellon inherited the title and ruled as Queen of Poland with the elected king Stefan Batory. After her sister's death the title passed to the youngest daughter Catherine, Queen of Sweden, who passed it on to her son, who became Sigismund III of Poland. Catherine raised her son as an ardent Catholic. After he inherited the Swedish throne (1592), his Catholicism would lead to his deposition (1599), followed by prolonged wars between Sweden and Poland.

(76) Poland was the more liberal country, for in Transylvania the four accepted religions fought bitterly with each other. Those were the Catholics, Lutherans, Calvinists and Unitarians.

Caution was not always followed

(77) Caution was not always followed. For instance, Lælius took the side of Bolsec, who in 1651 was imprisoned for rejecting Calvin's doctrine on predestination. Lælius accused Calvin of obscuring the doctrine of salvation by convoluted discussions. Calvin reacted furiously, asking Lælius not to bother him any more. He expressed his regret that Lælius allowed himself to be corrupted by "*pernicious fictions*" and warned him to stop meddling in religious affairs before "*my (Calvin's) indulgence is exhausted*" and "*before you bring on yourself big trouble*". No idle threat from Calvin's mouth. Apparently Lælius made up for it, because later he managed to secure a letter of introduction from him for his upcoming visit to Poland. ("Ioannis Calvini opera quæ supersunt omnia", M. Bruhn # 1870, reprint Minerva 1964, Vol. XIV, p. 231)

(78) From the on-line edition, Hugh Pope, transcribed by Janet Grayson.

The hosts of Anti Christ, or the Taborite insurrection

(79) The expression that the Hussite cause is the sacred cause of God's light and truth against the Devil's falsity and darkness is from Reverend James Aitken Wylie (1808-90) included in the address to his voluminous work "The History of Protestantism", expression borrowed in its turn from the Scottish essayist, satirist and historian Thomas Carlyle (1795-1881).

James Wylie tells in his "The History of Protestantism" (Vol. 1,3 ch. 13):

« « Ziska, at the head of his now numerous host, a following rather than an army, entered Prague, where the righteousness of the Hussite cause, and the glory of the success that had so far attended it, were tarnished by the violence committed on their opponents. Many of the Roman Catholics lost their lives (mostly clerics) (...) Their establishments in Prague and throughout Bohemia were pillaged. These were of great magnificence. Æneas Sylvius, accustomed though he was to the stately edifices of Italy, yet speaks with admiration of the number and beauty of the Bohemian monasteries. (...) Mount Tabor, where the standard of Ziska continued to float, was to become, so they thought, the head of the earth, more holy than Zion, more invulnerable than the Capitol. It was to be the centre and throne of a universal empire, which was to bless the nations with righteous laws, and civil and religious freedom. Ziska's armies were swelled from another and different cause. A report was spread throughout Bohemia that all the towns and villages of the country, five only excepted, were to be swallowed up by an earthquake, and this prediction obtaining general credence, the cities were forsaken, and many of their inhabitants crowded to the camp, deeming the chance of victory under so brave and fortunate a leader as Ziska very much preferable to waiting the certainty of obscure and inglorious entombment in the approaching fate of their native villages. (...) The war now resumed its course. It was marked by the usual concomitants of military strife, rapine and siege, fields wasted, cities burned, and the arts and industries suspended. The conflict was interesting as terrible, the odds being so overwhelming. A little nation was seen contending single-handed against the numerous armies and various nationalities of the Empire. Such a conflict the Bohemians never could have sustained but for their faith

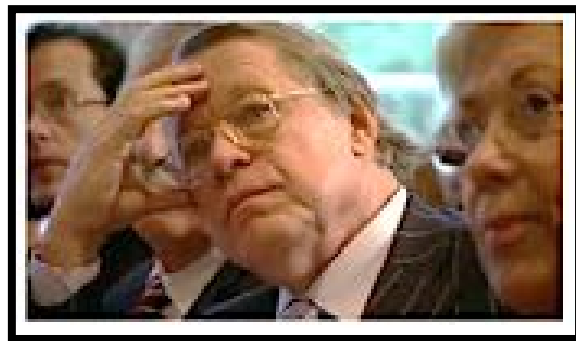
in God, whose aid would not be wanting, they believed, to their righteous cause. Nor can any one who surveys the wonderful course of the campaign fail to see that this aid was indeed vouchsafed. Victory invariably declared on the side of the Hussites. Ziska won battle after battle, and apart from the character of the cause of which he was the champion, he may be said to have deserved the success that attended him, by the feats of valor which he performed in the field, and the consummate ability he displayed as a general. (...) To this day the Hussites have never had justice done to them. Their cause was branded with every epithet of condemnation and abhorrence by their contemporaries. At this we do not wonder. But succeeding ages even have been slow to perceive the sublimity of their struggle, and reluctant to acknowledge the great benefits that flowed from it to Christendom. It is time to remove the odium under which it has long lain. »»

No wonder that the Freemasons are proud of John Ziska, this 'man of valour', who in his fight against the Roman Catholic Church, was fighting Christianity in general because, as Cardinal Hosius has shown, Catholicism is strictly identical with Christianity. (Whether James Wylie, described in his time as a fanatic, was a Freemason, I cannot say, but I know that his writings are highly appreciated within Masonic circles.)

The House with the Heads, now a forum for the exploration of gnosis

(80) In 1957 the Amsterdam businessman Joost R. Ritman founded the Bibliotheca Philosophica Hermetica (BPH), a publicly accessible library dedicated to Christian-Hermetic gnosis. In 1984 a research institute and a publishing house were added to the library. With the acquisition of the House with the Heads in 2006, Ritman hoped *"to create a forum for a wide range of activities with an open, cultural character and with its roots in modern society, with in future the exploration of the study of gnosis in the House with the Heads."* The website launched for the occasion, mentioned: *"...Comenius lived in the 'Huis met de Hoofden' for a number of years. He defined the search for wisdom as follows: 'All the world is a school of divine wisdom, which man must finish before he is admitted to the heavenly academy.' And now the House with the Heads will be a place where that divine wisdom can be studied."*

Joost Ritman ended his speech on Oct. 26, 2007, when the BPH celebrated its 50-year jubilee in the House with the Heads, by saying: *"I am very happy to say and to feel that this day, today, yesterday, is a turning point in the history of mankind."* Of course, he had not in mind a Christian mankind! On the website of the Ritman library, Joost Ritman is quoted as saying: *"There is nothing supernatural about the world around us. On the contrary, everything is part of one organic, interactive and totally self-evident whole. Salvation is only to be found in growing awareness."* [The photograph of J.R. Ritman was taken during the jubilee meeting.]



*businessman Joost Ritman (1941-)
founder of the Bibliotheca Philosophica Hermetica*

The Church has its own ways of getting at the truth

(81) A parallel can be drawn with the Conclave of 1903; Cardinal Rampolla was then elected pope, but to the amazement of everyone involved, the metropolitan cardinal of Crakow in Poland intervened to veto the election in the name of His Imperial Majesty Franz Josef, then Emperor of Austria-Hungary, and the cardinal of Crakow refused to come up with an explanation. Years later, it became known that Rampolla was vetoed because he not only belonged to a Masonic lodge, but also to the "Ordo Templi Orientis", a New Age insanity of people like Madame Blavatsky and the occultist Aleister Crowley. Instead of Rampolla they elected Sarto, known today as Saint Pius X.

Some thoughts on the prohibiting of the printing of Socinian literature in Holland

(82) The “Irenopoli, Post annum Domini 1656” on the title pages of the BFP volumes (Bibliotheca Fratrum Polonorum) could mean that they were printed after the edict of 1656 by the States General proscribing the publication of Socinian literature. The other interpretation, and more to the point, is that thee volumes were printed after the expulsion of all Socinians from Poland. Consequently, as from that year, Amsterdam became the Socinian (c.q. Rosicrucian) new home. The old capital was London, yet the sands of time were running out in England, with Royalist uprisings in 1655 and a number of events that were making life difficult for Cromwell. From this point of view too, the removal to Amsterdam seemed appropriate. The Order remained in Amsterdam until it moved back to London, which happened shortly after William III of Orange became king of England, having ousted his father-in-law from the throne in the operation known as the Glorious Revolution, which was planned from beginning to end by the same conspiratorial forces that moulded the English Civil War.

(83) Reference: “ ‘s Graven Hage”, J. Scheltus # 1683 (part 3, p. 523).



APPENDIX

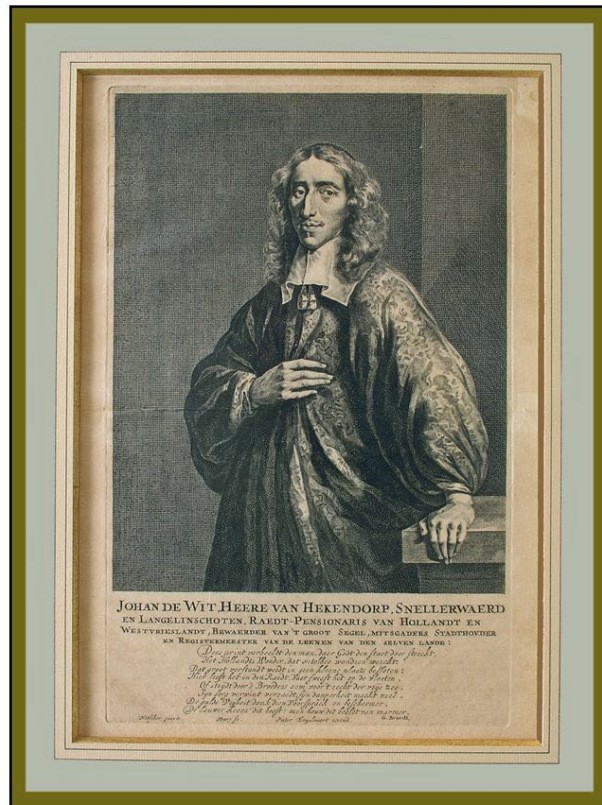
The forbidden works mentioned in the Edict of 1674 against Socinianism : Leviathan – Bibliotheca Fratrum Polonorum – Tractatus Theologico-Politicus

Thomas Hobbes' Leviathan was published in 1651 in London. In its time it was one of the most influential books on political philosophy. The writer advocates a 'social contract' and rule by a sovereign state. Influenced by the English Civil War, Hobbes conceived absolute monarchy as a lesser evil than chaos and civil war, more or less identified with a kind of Darwinian state of nature and exemplified by the motto "the war of all against all". He denied any right of rebellion against the contract, an idea which would be adopted by the political philosopher John Locke and which reeks of the absolute dictatorship of the State.

The Bibliotheca Fratrum Polonorum (BFP) is a large work with tracts of the Socinian movement of the time when it existed in Poland. The eight volumes (later editions were sometimes six or ten volumes) were printed in Amsterdam from 1665 until 1668. This was made possible because Helvetius, the physician of William III, had become the influential protector of Socinianism – according to the precept that whoever treats the sickness, rules the emperor. Helvetius was converted to the blasphemous persuasions of the Socinian masters after the then current head of Socinianism had shown him the merits of magical alchemy, which happened in the winter of 1666-67 and is described in his book Vitulus Auræus (the Golden Calf).

Comenius' « Lux in Tenebris » and his « Lux 'e' Tenebris » should also have been mentioned in the Edict. The first book was published in 1657 in Amsterdam; it was in a very limited edition and it is likely that this one escaped the attention of the authorities. The expanded version, with a much larger print run, was not published until 1665. Yet, Comenius was not considered a Socinian because of his anti-Socinian writings, published in the period of 1659 until 1662, intended no doubt to cover his tracks.

It should be mentioned that William III was 'Child of State' until 1667, his father having died on November 6, 1650, one week before he was born. In July 1667 the States adopted the Act of Harmony, to be known later as the Everlasting Edict (Eeuwig Edict), which intended to dispense



Grand Pensionary Johan de Witt

with the House of Orange for ever. It was an elaboration of the secret Act of Seclusion which ‘Raadspensionaris’ Johan De Witt had concluded with Cromwell as early as 1654). Holland being the most powerful province, De Witt was effectively the political leader of the United Provinces as a whole. That is why the ‘Raadspensionaris’ of Holland was also referred to as the Grand Pensionary – in many way similar to the modern Prime Minister. The Republic under De Witt lasted until the ‘disaster year’ 1672 (rampjaar), when the people in desperation cried for the return of the House of Orange. That year, William III of Orange became the officially appointed ‘stadtholder’.

The Theologico-Political Treatise, by Benedict Spinoza (excommunicated by Judaism in 1656), was published anonymously under the auspices of Johan De Witt in 1670. It was at first well-received, but following De Witt’s assassination by a lynch mob in 1672, political support for the treatise waned. In it, Spinoza put forth his most systematic critique of Judaism and organized religion in general. He rejected the belief that there were such things as prophecy and the supernatural. He argued that God acts solely by the physical laws of his own ‘nature’ and he categorically rejected that God could have any purpose in mind.

In the long run Tractatus proved of decisive influence for the direction of biblical evaluation that tries to destroy the divine authority of Holy Scripture, a form in vogue today and known as Modern Biblical Criticism. A contemporary of Spinoza (who outlived him by 35 years) was the priest Richard Simon, who was fond to call himself a Spinozist. He defended the Tractatus and poured scorn on everyone who criticized it. Simon’s epoch making book “Histoire critique du Nouveau Testament” was written in the vein of the Tractatus and was to be published one year after Spinoza’s death, in 1678. By a decree of the Royal Council of France the whole edition of 1,300 books was seized and destroyed, but one copy survived and was soon reprinted in Amsterdam.



The list of successors to Fausto Socinus in the leadership of the Socinians / Rosicrucians helps to follow the lead towards the institution in 1717 of the Mother Lodge of Freemasonry in London:

1. Cesare Cremonini	1604 - 1617
2. Michael Maier, Count of Rindsburg	1617 - 1622
3. Valentinus Andreae	1622 - 1654
4. Thomas Vaughan	1654 - 1678
5. Charles Blount	1678 - 1693
6. Johann-Friedrich Helvetius	1693 - 1709
7. Richard Simon (a priest)	1709 - 1712
8. John Theophilus Désaguliers	1712 - 1744

Explanatory Remarks

Below is a translation of the 17th century Ordinance by the Dutch government against « Tractatus Theologico Politicus », which is a Socinian book. Socinianism, or Rosicrucianism, is at the root of Freemasonry. After its followers were chased from Poland in 1660 under penalty of death, they went to Holland. At a later stage only they went to London. In Holland they recruited a number of eager adepts, amongst whom Spinoza.

In July 1674 Dutch government published the ordinance condemning the Socinian books, Leviathan (by Thomas Hobbes), and other harmful books, and in particular Tractatus Theologico Politicus, written by Spinoza. Although he might not have been a devil worshipper, the highest Socinians certainly were. Anyhow, Spinoza felt at ease with them.

Benedict Spinoza (excommunicated by Judaism) anonymously published the Tractatus in 1670 under the auspices of the most powerful man then in Holland, the Councillor Pensionary Johan De Witt. It was at first well-received, but following De Witt's assassination by a lynch mob in 1672, political support for the treatise waned. In it, Spinoza put forth his most systematic critique of Judaism and organized religion in general. He rejected the belief that there were such things as prophecy and the supernatural. He argued that God acts solely by the physical laws of his own 'nature' and he categorically rejected that God could have any purpose in mind.

In the long run Tractatus proved of decisive influence for the direction of Biblical research that tries to destroy the divine authority of the Holy Scripture, a form in vogue today and known as Modern Biblical Criticism (MBC).

A contemporary of Spinoza, who outlived him by 35 years, was the priest Richard Simon, who at the end of his life was head of the Rosicrucian movement. He was fond to call himself a Spinozist. He defended the Tractatus and poured scorn on everyone who dared to criticize it. Simon's epoch making book "Histoire critique du Nouveau Testament" was written in the vein of the Tractatus and was to be printed in 1678, one year after Spinoza's death. By a decree of the Royal Council of France the whole edition of 1,300 books was seized and destroyed, but one copy survived and was soon reprinted in Amsterdam. Both Spinoza and Simon are called the fathers of the Modern Bible Criticism, which attests to a blasphemous persuasion.

***Edict of the Hof of Holland
against the Socinian Books,
Leviathan and others***

Dated 19th July, 1674

From the “Groot Placaet Boeck”, containing the proclamations (...) of the (...) States General (...) and of the States of Holland and West-Friesland; and of the (...) States of Zeeland, condemning the Tractatus Theologico Politicus.

Willem Hendrik, by the grace of God Prince of Orange and Nassau, Count of Catzenellenbogen, Vianden, Diest, Lingen, Moers, Buren, Leerdam, etc... And the President and Councils of Holland and West-Friesland: Having learned that for some time several Socinian and other harmful books have been published by way of printing and are still daily being spread and sold, as there are the books entitled Leviathan, Bibliotheca Fratrum Polonorum, quos unitarios vocant, Philosophia Sacrae Scripturae interpres, and also Tractatus Theologico Politicus, and finding, after examination of the contents of these that they not only deny the Doctrine of the true Christian Reformed Religion, but also abound with all calumnies against God and his Qualities and his Trinity worthy of admiration, against the Divinity of Jesus Christ and his Atonement, and also [against] the fundamental main tenets of the said True Christian Religion, and that they, in effect, try as much as they can to render the authority of the Scriptures contemptible and attempt to confuse weak and unstable minds, all directly against repeatedly issued Resolutions and Edicts of the Country [prohibiting this], Thus, in order to restrain this harmful poison and in order to prevent as much as possible that anybody shall be misled by this, we have judged it our duty to declare the said books to be as we deemed aforesaid, and to condemn them as blasphemous books, pernicious to the soul, full of unfounded and dangerous propositions and abominations, detrimental to the True Religion and divine Worship. Therefore we herewith as yet prohibit each and everyone to print, to spread or to sell these or similar books on auctions or otherwise, under penalty of the Edicts of the Country and especially that of September 19th 1653 which has been issued to this end. We order anyone whom it may concern, to comply with this [edict], and that this [edict] will be published and posted up everywhere where it should be and is customary in similar matters. Given under the Seal of [the] Judiciary stamped below on July 19th 1674. Beneath [that] it said: In my presence.

Signed: Ad. Pots. Bk.XIB:1981.

Translation from Dutch by Nynke Leistra.

Source: Groot Placaet Boeck (in J. Scheltus, 's Graven Hage, 1683, 3rd part - p. 523, from Pollock's bk. XII:444, app. B.) That of June 25, 1678, condemning the Opera Posthuma, is to be found at p. 525 of the same book, but inasmuch as it is also reprinted in Van der Linde's Bibliografie 24, it is not given here.

The original Dutch of the «Placæt van den Hove van Hollandt tegen de Sociniaensche Boecken Leviathan en andere... »

Wilhem Hendrick, by dergratien Godes Prince van Orangeen de Nassau, Grave van Catzenellebogen, Vianden, Diest, Lingen, Moeurs, Buyren, Leerdam, &c. Midtsgaders den Praesident ende Raeden over Hollandt ende West-Vrieslandt: Alsoo Wy in ervaringe komen, dat t'zedert eenigen tijdt herwaerts verscheyde Sociniaensche ende andere schadelijcke Boecken, met den Druck zijn gemeen gemaect, ende noch dagelijcx werden gedivulgeert ende verkocht, als daer zijn de Boecken genaemt de Leviathan, Bibliotheca Fratrum Polonorum, quos unitarios vocant, Philosophia Sacrae Scripturae interpres: als mede Tractatus Theologico Politicus, ende dat Wy naer examinatie van den inhoud van dien bevinden, niet alleen dat de selve renverseren de Leere van de ware Christelijcke Gereformeerde Religie, nemaer oock overvloeyen van alle lasteringen tegens Godt, ende syne Eygenschappen, ende des selfs aanbiddelijcke Drie Eenigheydt, tegens de Godtheydt Jesu Christi, ende syne Ware voldoeninge; midtsgaders de fundamentele Hooft-Pointen van de voorschreve Ware Christelijcke Religie, ende in effecte d'autoriteyt van de Heylige Schrifture, t'eenemael soo veel in haer is in vilipendie, en de swacke ende niet wel gefondeerde gemoederen in twijfeling trachten te brengen, alles directelijck jegens iterative Resolutien ende Placaten van den Lande daer jegens ge-emanet. Soo ist, Dat wy tot voorkominge van dit schadelijck Vergift, ende om soo reel mogelijk te beletten, dat daer door niemant en moge werden misleyt, hebben geoordeelt van Onsen plicht de voorsz. Boecken te verklaren soodanigh als voorsz is, ende te decreren voor Godslastelijcke en Zielverdeffelijcke Boecken, vol van ongefondeerde en dangereuse stellingen en grouwelen, tot naedeel van de Ware Religie ende Kerchendienst. Verbiedende dienvolgende als noch by desen allen ende een yegelijcken, de selve of diergelijcke te Drucken, divulgeeren ofte verkoopen, op Auctien ofte andersints, op peyne by de Placaten van den Lande, ende specialijck dat van den negenthinden September 1653, daer toe ghestatueert: Lastende een yeder die dit aengaet, hem daer na te reguleren, endedat desen sal worden gepubliceert en alomme geaffigeert, daer het behoort, ende in gelijcke saecken te geschieden gebruyckelijck is. Gegeven onde het Zegel van Justicie hier onder opgedruckt, op den negenthinden Julij, 1674. Onder stont, In kennisse van My. Was gheteckent, Ad. Pots. Bk.XIB:1981.



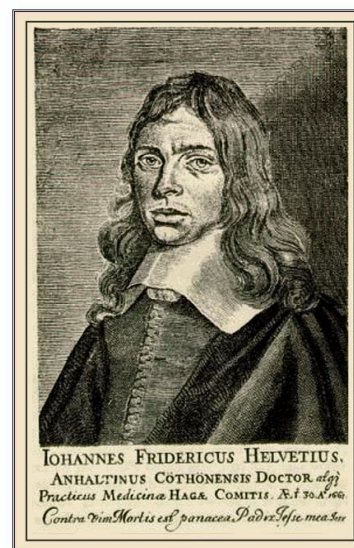
The Ascent of Man and Science *in confrontation with the* *Mysterium Coniunctionis*

***Introductory note:** This is the second chapter on alchemy. In chapter 9 a connection is made between alchemy, magic and devil worship, and we indicate how this played a part in the life of the important and admired figures of their age, who like Spinoza claimed to be guided by reason only. That, however, is far from the truth. It is essential to tackle this issue, because those men who practised magical alchemy appear to have been the forerunners of our modern science. We will therefore discuss the wanderings of those men whom I call Socinian-Alchemists. To close the circle, we will study how alchemy transmuted into science, which will be the main topic of the later chapters.*

The Alchemical connection (9) (17th century)

9.1 – How Helvetius became a worthy brother

Helvetius, otherwise known as Johann-Friedrich Schweitzer, was head of the Rosicrucian movement from 1693 until his death in 1709. He lived in The Hague and was for many years the physician-in-ordinary of William of Orange and carried the title of “Chief Physician of the States General”. A sensible man, he scoffed at alchemy and anything magic. Author of books on medical and botanical matters he was known to be a careful and objective observer. In 1650 he published a book in Frankfurt, “De Alchymia”, that made mincemeat of the alchemical pursuit. A few years later he he saw fit to attack the alchemist and Rosicrucian Sir Kenelm Digby (1603-‘65), deriding his ‘powder of sympathy’. Sir Kenelm belonged to the troops, because upon the incorporation of the Royal Society in 1663, he was appointed one of the council. Yet, Helvetius became an adept of alchemy, very suddenly. What made him change his mind? In his *Vitulus Aureus* (Amsterdam, 1667), Helvetius tells how he was introduced to ‘magical’ alchemy by a black-haired, scruffily dressed stranger who paid him an unexpected visit on a freezing cold night in late December. Evidently he did not remain a stranger, but Helvetius does not want to reveal his name. He describes him as a man of small stature, with a long small face, a beardless chin and of about three or four and forty years of age.⁽⁸⁴⁾ The calendar still pointed 1666. It has been asserted that the stranger was famous alchemist Eirenaeus Philalethes, better known as Thomas Vaughan. This stranger appears to have been the master himself, so Vaughan writes in his diary. To cover the tracks, Helvetius says the stranger was born in North Holland.



However, he was born in Wales but ‘came’ from Amsterdam, which of course lies in North Holland.

Thomas Vaughan was an influential person. As from the 1640s, he first stimulated and then proceeded to a more systematic infiltration of the Guilds by the Rosicrucians in view of their transformation and usurpation towards the Socinean ideal, which by 1640 had already accepted a number of Rosicrucians.⁽⁸⁵⁾ He was the man who, in that early time and together with his worthy brother Elias Ashmole, designed the first rituals for ‘accepted Masons’, for those individuals, the non-operatives, who were adopted by the Guilds as bystanders and did not practice the craft and were thus in need, so Vaughan imaginatively stated, of rituals comparable to those of the craftsmen.⁽⁸⁶⁾ Vaughan is rightly regarded as the founder of ‘speculative’ Freemasonry (the craftsmen’s section was called operative). Hence his little visit to Helvetius was not without effect.

So it happened that the home of Helvetius became the centre of the alchemical world, with devotees flocking there from all corners of Europe. Spinoza, the great sceptic, was brought to acknowledge the virtues of ‘magical’ alchemy, convinced of it by Helvetius whom he knew well. Nothing indicates that Spinoza belonged to the perfect initiates, though he was in close contact with them and shared many of their blasphemous persuasions. Yet he is held in high esteem in the Netherlands; as a mark of honour his effigy was shown on the thousand-guilder banknotes issued after World War II.

9.2 - Devilish tricks

That ‘magical’ alchemy was obtained through the adoration of Satan and his works was only known to the small circle of ‘perfect initiates’. Nonetheless the authorities in different countries had reason to suspect that alchemy was not an innocent pastime. Transmutation – the changing of lead into gold – was considered a capital offence. Anyone attempting to trade 100% pure gold risked being arrested, for they had no technical means, then, to purify gold to such an extent. For privately alloying of precious metals – often used for coins, the details of which were kept secret – the penalty was death. Alloying, therefore, offered no solution. Vaughan recounts how he was found to have produced his gold by magical means, being betrayed by its extreme purity, and he had to leave it with the gold merchant in order to prevent further trouble.⁽⁸⁷⁾ Helvetius, becoming leader of the Rosicrucian movement, had to be a perfect initiate and as such ought to have known the idolatrous rituals involved in transmutation, and yes, it is still practised today. I do not believe in transmutation for the making of gold by throwing some lead into fire, but I do believe in devilish tricks. Lucifer has this power to deceive those who deserve it. Take my word, it is not easy to be ‘deserving’. One needs tenaciousness on the road to perdition. It is beyond a shadow of doubt that all the perfect initiates were fully dedicated to being possessed by the Devil, and that they wanted to be and indeed were possessed. We should take to heart the admonition of the apostle Paul (Eph. 6:10-12): *“Finally, my brethren, be strong in the Lord and in the power of His might. Put on the whole armor of God, that you may be able to stand against the wiles of the devil. For we do not wrestle against flesh and blood, but against principalities, against powers, against the world-rulers of this very darkness, against the spirits of wickedness in the heavenly spheres.”* It seems incredible that Lucifer has been given the power to transmute base metals into gold, but it is not unbiblical. 2 Thessalonians 2:6-12 reads:

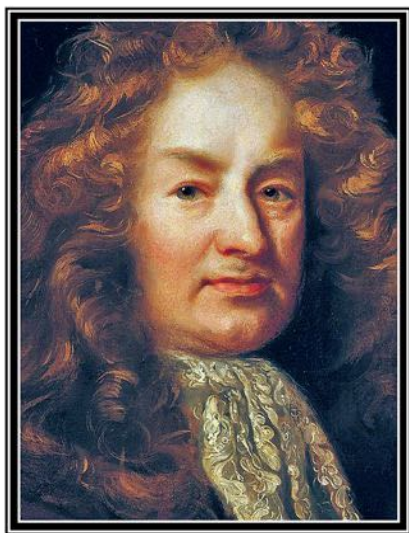
«« And now you know what is restraining, that he may be revealed in his own time. For the Mystery of Lawlessness is already at work; only He, (the Church undefiled, salt of the earth), who now restrains, will do so until He is taken out of the way (by means of the doctrinal corruption, that is the Abomination of Desolation spoken of by Daniel the prophet). Then (Lucifer’s underling), the lawless one, will be revealed, whom the

Lord will slay with the (creative) breath of His mouth (in the utterance also of oracles of truth), and destroy by the brightness of His coming. The coming of the lawless one is according to the working of Satan, with all power, signs, and living wonders, and with all unrighteous deception among those who perish, since they did not receive the love of the Truth that they might be saved. And for this reason God will send them strong delusion, that they should believe the lie, that they all may be condemned who did not believe the Truth but had pleasure in unrighteousness. »»»

9.3 – *The authorities were getting ever more suspicious*

Alchemy took on a recognisable form through a gathering of cultures and influences in the world town Alexandria, but it did not become part of the mediæval society here in the West. The art and science of alchemy was brought to the West by the movement of Arab works translated into Latin, which started around the middle of the 12th century. A work of particular interest is “De congelatione et conglutinatione lepidum”, in a translation taken from Avicenna’s Book of Healing, already mentioned. It professed that a transmutation of metals in principle is impossible, a position also taken by St. Albertus Magnus O.P. in his “De Mineralibus”. We can leave aside the many dubious works falsely ascribed to him. It seems clear that both accepted a transmutation of some kind by natural processes that were not accessible in the human domain. Nicolas Weill-Parot explains that in his authentic works, the 13th-century Friar Roger Bacon takes a somewhat

different stand.⁽⁸⁸⁾ In his “Scientia Experimentalis” he proposes that experimentalism is an excellent tool against the fraudulent magic of the Antichrist. A very sensible approach. What he is trying to say is: yes, magic is possible, but forbidden. Because the magical practice departs from the possibilities that lay hidden in the natural order of things, the borderline between magic and the ordinary is rather vague. Bacon was right that the experimental routine, based on repeated and precise observation, constitutes a safeguard against the forbidden and vaguely spiritual, which exerts a strong power of attraction on the gullible mind.



Elias Ashmole

As from the 14th century alchemical works start to abound in spite of the fact that as early as in the 13th century several monastic orders had prohibited the practice of alchemy and the authorities, ecclesiastical as well as secular, were becoming ever more suspicious of it. They sometimes

took harsh measures to suppress it. Alchemists were usually not involved in Satanism, at least at the outset, and often succeeded only in destroying their own lives or in duping men who had plenty of money to spare, which was being spent on the costly pursuits. If Satanism was involved in the “aura sacra famis” (execrable thirst for gold), it was more often than not applied amateurishly. The perfect initiate Elias Ashmole compares these dabblers to swine who insolently intrude into magic and, while making use of the Devil’s assistance “*counterfeit and corrupt the admirable wisdom of the magi, between whom there is as large a difference as between angels and demons*”. He does not deny the reality of magical alchemy, but exhorts that it should not be confused with the mean craft of conjurors, necromancers and witches.⁽⁸⁹⁾

Notes

Vaughan convinced Helvetius of the virtues of magical alchemy

(84a) The story of how Helvetius was converted to alchemy is found in the book of Michael White “Isaac Newton”, already mentioned. See the beginning of ch. 6: “The Search for the Philosophers’ Stone”. Here Michael White tells also how Helvetius managed to convince Spinoza of the virtues of magical alchemy, which is taken from the Vitulus Aureus.

(84b) In the first line of the English version of the Introitus Apertus, Thomas Vaughan explains that he was born in 1612. Because the book is little known, people have concluded from the Helvetius tale that he was born in 1622 and so has the printer in Amsterdam of the Latin version of 1667 that must have been printed shortly after the Vitulus Aureus. But Helvetius writes: “*Two days after Christmas in 1666 ...a stranger ...about three or four and forty years of age, as I guessed.*” Its title is in full “Introitus Apertus ad Occlusum Regis Palatium” or “The Open Door into the Secret Palace of the King”. Newton took it to heart as appears from his many notes written in it. The pages have large margins so as to allow for annotations. The book is in Newton’s library, or what is left of it. Vaughan’s most important work, it remains difficult to digest, because it is written in the symbolic language of the perfect initiate. Jan Lange, who was commissioned to translate it into Latin, expressed concern about the defects of his translation. And so the edition in the original English appeared in 1669, this time in London. A later French version was based on the Latin translation and has a number of faults added to it.

The Rosicrucian movement today is not a direct offspring of the old one

(85) After the successful infiltration and transformation of the Masonic Guilds by the Rosicrucian Movement, it lost its raison d’être. It ceased to exist after Johan Wolff’s death in 1780, its last head. The groups that emerged later, calling themselves Rosicrucian, are not Socinian, although they have some points in common.

The design of the first Masonic rituals

(86) The first Masonic rituals were designed over a four-year period, beginning in 1646. The execrable legend of Hiram determines the protocol during the elevation to the third Masonic degree. This legend was taken from a Targum in a compilation by Jonathan ben Uziel, member of the Sanhedrin that convicted our Lord and Saviour. See in the Appendix “The Legend of Hiram Abiff”, with an interpretation of its symbolic portent. The legend was, no doubt, discovered by Elias Ashmole who, born a Christian, had learned to read Hebrew and Aramaic at the school of rabbi Salomon Franck in order to become versed in the Kabala. Ashmole was a perfect initiate and made a name as an alchemist and antiquarian bookseller, and he is the provider if not the founder of the Oxford Museum. Though Ashmole discovered the legend, Vaughan composed the ritual. In 1649 the third or Master degree was the final level in a system borrowed from the degrees in Rosicrucianism. At a later stage, Freemasonry adopted additional degrees up to thirty-three. In view of its historical relation to the present system, the Hiram protocol merits our special attention.

The pseudonyms used by Thomas Vaughan

(87) Vaughan recounts how he was found to have produced his gold by magical means in chapter 13 of Introitus Apertus, already mentioned. The book is written under the name of “Anonymo Philaletha Philosopho”, and people are not sure for whom it stands. Diana Vaughan, however, is adamant that it stands for Thomas Vaughan. To close the argument, I like to point to the edition of Daniel Elzevir (Amsterdam, 1678), which contains Vaughan’s Enarratio, Experimenta and Ripley. At the end of this volume, as a token of honour in the year of his death (1678), there is a list of fifteen books by **Æyrenœo Philalethe Cosmopolite**, that were published in English and in Latin. The first one mentioned on the list is Introitus Apertus with its year of publication (1667). On the list are a number of books, like Magia, Lumen and Euphrates, that were once published under Eugenius Philalethes (acknowledged to designate Thomas Vaughan), and some books under Eirenæus Philalethes, which means that those three names stand for one and the same person. The BFP is not mentioned because he did not write them; his work for that collec-

tion consisted of rendering fit for publication a pile of documents from Poland that were written in Latin.

(88) “Dictionnaire Encyclopédique du Moyen Âge” sous la direction d’André Vauchez (Cerf – Paris # 1997), sous Alchimie.

(89) Taken from “Theatrum Chemicum Britannicum” by Elias Ashmole - London # 1652 (p. 443). In an inversion of values satanists call demons good spirits and the angels, or maleachs, bad spirits.



APPENDIX

The Legend of Hiram Abiff

– Type of the Antichrist –

The outstanding figure in Freemasonry is undoubtedly the widow's son known to members of the fraternity under the somewhat obscure name of Hiram Abiff. He dominates the ritual where the apprentice is to become a third degree Master, and that in spite of the fact that neither the apprentice nor the fellow-craftsmen know anything about him that warrants the protocol. Surprisingly even most Freemasons of the higher echelons barely understand the exact meaning of the ritual. Only those men who in course of time have shown the right disposition are allowed to get a glimpse, and perhaps more, of the real import of the different acts. We are about to explain, to make you privy to one of the greatest secrets of Freemasonry. You should realize that Freemasonry is no secret organisation in the strictest sense: many individuals are known to belong to and their temples are known. The secrecy is hidden in their true objectives that are known only to the select few within the organization itself – less than one in hundred belong to that inner circle.

Hiram is a known Biblical figure. According to 1 Kings 5:6, King Solomon sends messengers to Hiram, king of Tyre, to acquaint that sovereign with his desire to erect in Jerusalem the Temple that will serve as the only temple for the whole of Israel. It therefore had to become grandiose. He invites Hiram to furnish men and materials for the execution of the work. In 1 Kings 7:13-45 it is said that Hiram, the son of a widow from the tribe of Naphtali, came to Jerusalem to carry out the work. His father was a bronze worker filled with the required wisdom and understanding and skill. He manufactured all kinds of bronze objects for the Temple among which two stalwart pillars called Jachin and Boaz, of which replicas are to be found in all Masonic temples, but that is not our focus of attention. This is what the Biblical story is about.

Out of this slender basis the Jewish oral tradition created a strange legend that was inserted into Masonic ritual (the Jews were not involved with the Freemasonic movement then). This legend states that Solomon's first demand was for a highly talented craftsman: "Send me now a man cunning to work in gold, and in silver, brass, and iron, and in the application of deep purple, and crimson, and royal blue, and who has the skill to work with the cunning men who are with me in Judeah and Jerusalem." The Order maintains that Hiram Abiff was the chief architect of the project, supervising the construction. Interestingly, they are used to call God "the Great Architect", but an architect in contrast to God creates nothing, but applies in a creative manner the already available material. A.·G.·D.·G.·A.·D.·U.· is often used in Freemasonic circles, which stands for: "A la Gloire Du Grand Architecte De l'Univers", or "To the Glory of the Grand Architect of the Universe". The Order associates Hiram Abiff with two other figures: King Hiram of Tyre, and King Solomon of Israel, an antitype to God the Son, God the Father and God the Holy Ghost. It is said that these three are the most exalted persons in the Masonic world and that the ultimate secrets had either been revealed to them by a grand master, or had been

discovered by themselves, and could not be told to anyone else without their common consent. There were master masons in abundance at the site, but apparently none of them was judged worthy to know the secrets and mysteries of the highest and sublime degree. Thus, when three inquisitive fellow-craftsmen sought to obtain the hidden knowledge, they were compelled to approach one or another of the three grand masters. They selected Hiram Abiff but when he refused to reveal the knowledge, the three ruffians murdered him brutally as described in the Masonic tradition.

In a remarkable interpretation King Solomon typifies God's reign on earth via the kingship by the grace of God. He knows the secret but wants the absolute power. In the Masonic philosophy Solomon is a despicable miscreant, just like the king of France, Louis XVI, who was scandalously murdered during the French Revolution. Clearly, Lucifer wants to give his reign to a better candidate than Solomon or any anointed king (the anointing points at the H. Ghost). Without Solomon's jealous plotting, the legend goes, the murder would never have happened. And so they cry: "REVENGE, REVENGE, REVENGE!"

The Biblical Hiram, who assisted King Solomon with the construction of the Temple, was the first prince of the glorious Tyre. In the Masonic ritual the word Hiram serves as a code for the fallen angel Lucifer or for his aide-de-camp, the Antichrist, being described in these terms in the passage of Ezechiel 28:1-10:

«« The word of Yahweh came again unto the prophet Ezekiel. Son of man, say unto the Prince of Tyre (Hiram Abiff c.q. the Antichrist): Thus saith the Lord Yahweh! Because your heart is lifted up, and you have said: "I am a god! I sit in the seat of God, in the midst of the seas." Yet you are a human, and not God, though you did set your heart as the heart of God and thought to be wiser than Daniel, that no secret is hidden from you. By your wisdom and by your understanding you have become very rich with gold and silver in your treasures. By your cunning and your traffic you have increased your riches. Your heart is lifted up because of your riches! Therefore saith the Lord Yahweh: Because you have set your heart as the heart of God, therefore, behold, I will bring strangers upon you, the terrible of the nations, and they shall draw their swords against the beauty of your wisdom, and they shall defile your brightness. They shall bring you down to the pit, and you shall die the death of them that are slain, in the heart of the seas. Are you willing to say before him that slayeth you: "I am God?" But no, you are human and not God. Will you shout that blasphemy while in the hands of him who kills you? You shall die the death of the uncircumcised by the hand of strangers, for I have spoken it, saith the Lord Yahweh.

The word of Yahweh came again unto me. Son of man, take up a lamentation over the king of Tyre (King Hiram c.q. Lucifer), and say unto him: Thus saith the Lord Yahweh! You seal up the sum as you are full of wisdom and perfect in beauty. You were in Eden, the garden of God. Every precious stone was your covering, the sardius, the topaz, and the diamond, the beryl, the onyx, and the jasper, the sapphire, the emerald, and the carbuncle. You had ornaments of gold. They were made for you on the day you were created. You were the anointed cherub that covereth. I have set you, so that you were upon the holy mountain of God. You walked up and down in the midst of the stones of fire. You were perfect in all your ways as from the day that you were created, till unrighteousness was found in you. By the abundance of your traffic they filled the midst of you with violence, and you have sinned. Therefore have I cast you as profane out of the mountain of God, and I have destroyed you, O covering cherub, from the midst of the stones of fire. Your

heart was lifted up because of your beauty. You have corrupted your wisdom by reason of your brightness. So, I have cast you to the ground and I have laid you before kings, that they may behold you. By the multitude of your iniquities, in the unrighteousness of your traffic, you have profaned your sanctuaries. Therefore have I brought forth a fire from the midst of you and it has devoured you. I have turned you to ashes upon the earth in the sight of all of them that behold you. All they that know you among the peoples shall be aghast, for you have become a terror, and you shall have disappeared for evermore! »»»

Hiram, King of Tyre, is a typos of the king of kings. Who other than Lucifer? Hiram Abiff, the son of the King of Tyre, having been murdered by the ruffians, is the typos of the beloved son in service of Lucifer. This aide-de-camp retained such a high standing that he was allowed to call himself the Great Architect. In the ritual he exemplifies the Antichrist. That will be a political figure that is supported by a spiritual leader, the anti-pope, called the False Prophet in the Book of Revelations. The head of the worldwide Masonic movement, calls himself pompously the Sovereign Pontiff of the Order of Hiram. Deeper one cannot sink.

The antichristian reign by King Hiram and Hiram Abiff and their allies is founded on the triple alliance of heresy, schism and occultism (satanism), which is symbolized by the Freemason's Temple of Jerusalem. These three terms also apply to an earlier construction, known as the Tower of Babel. The Masonic Temple, which through the ages is nearing completion, stands for the zeal, organisation and involvement of many for the coming about of the evil empire. The work on the Temple may be seen as a kind of reconstruction of the Tower of Babel. This is an anti-model that still reaches with its pinnacle into the heavens, where it mocks everything that belongs to God. Applying oneself to the achievement of that evil empire is called the rebellion against God. Yet, curiously, it is a rebellion into which many adherents may be driven with the best of intentions. In name of God people can do horrifying things. Few are willing to admit who they really are...

In the ceremonial of the elevation to the third degree, mentioned at the beginning of this article, Hiram Abiff, who was slain by the ruffians, rises from the dead. Before the coffin is opened, from which the resurrection takes place, the very respectable master of ceremony shouts: **Mac Benac!**, which means "the flesh leaves the bones", according to the hallowed principle that via decay comes reconstruction; or, stated differently: that a revolution, like the French Revolution, is the necessary precursor to renewal. As an acronym M·A·C·B·E·N·A·C· stands for: "Movebor Adversus Christum Bellum Eternum Nam Antichristus Consurrexit", or "I will promote an eternal war against Christ, because here the Antichrist has risen." So, when during the initiation the postulant, who stretches out in the coffin, typifies master Hiram, this not alone imprints in his mind that death is preferable to betrayal of the Masonic 'ideal', but it impresses also upon the fraternity that someone who works for the reign of Satan may hope to be received as a worthy brother into the Grand Lodge above, where the world's Great Architect exalts himself above God the Creator and also above the earthly kingship by the grace of God. For that reason H·I·R·A·M· signifies "Hic Iacet Rex Adventurus Mundi", or "In this coffin sleeps the future king of this world".

The plot is only another version of the legend of Osiris and Isis. The search for Hiram's body; the enquiries made of a wayfaring man, and the intelligence received; the sitting down of one of the party to rest and refresh himself, and the hint conveyed by the sprig over the grave; the decaying putrefying body of Hiram, remaining fourteen days in the

grave that had been dug by the assassins, before being discovered. All these elements have allusion to the allegory of Osiris, who was cut into fourteen pieces. The way even in which the grave of Hiram is found, covered with green moss and turf, corresponds with that in which Isis found the coffin of Osiris.



Much of the elaborate ceremonial has a close affinity to the ancient sun-worship. In the legend of Osiris the authors found something that fitted in exactly with the scheme. Hiram was made to represent Osiris, or the sun, the glorious luminary of the day. The three fellow-craftsmen, as the ceremonial of the initiation takes form, are stationed at the East, South and West entrances, and these are regions from which the sun shines. Twelve persons play an important part in this tragedy, a number that alludes to the twelve signs of the zodiac. It has been suggested that the three assassins symbolize the three inferior signs of winter: Libra, Scorpio, and Sagittarius. The sun descends in the West, and it is at the West gate that Hiram is slain. The acacia which typifies the new vegetation, that will come as a result of the sun's resurrection, is a symbolism found in many ancient solar allegories, and it is has therefore been easily introduced into the Masonic ritual. According to one statement, the slain body was found on the seventh day, and this again may allude to the resurrection of the sun, which actually takes place in the seventh month after its passage through the inferior signs, that passage which used to be called its descent into hell.



The Ascent of Man and Science *in confrontation with the* *Mysterium Coniunctionis*

Introductory note: *This is the third chapter that discusses the alchemic relation to science as it came to be. When we speak about Satanism, we speak about Freemasonry, where it is still practiced in certain circles. Contrary to what one might expect, Satanism often concords with the super rationalistic and materialistic spirit and this is precisely the spirit that has infected our modern science. Freemasonry is no secret organization. It is their occult ideals and perverse objectives that are secret, except of course for the exclusive club of insiders.*

‘Science as a Trojan Horse’ (10) **(16th and 17th century)**

10.1 – The transformation of the ancient Free Mason Guilds into Freemasonry

As we have seen, at the alchemical or Satanic convent in Magdeburg it was decided to reveal the movement to the world after another hundred years had gone by, therefore in 1717. The way to proceed was not yet clearly defined. In course of time the idea ripened to set up an organization by means of an already existing one, that required some adaptation in order to serve the means and purpose of the anti-Christian sect. The true movement could hide itself within the new entity like a pit in a fruit. This would serve to hide their blasphemous inclinations to the outside world. The international association of Free Masons, that existed for the construction of cathedrals, whose highdays were over, appeared to offer the perfect hiding place they were looking for.

Why do we need to know about the development that lead to the establishment of the Freemasonic movement? Because the prominent figures in this also played an active role in the discovery of the modern scientific method, either by direct involvement, or indirectly via the dissimulation of literature, and by discussion forums like the Hartlib Circle. To understand the infiltration and transformation of the ancient Masonic guilds by the brainchild of the Socinians – we are talking about the Rosicrucian movement – we turn our attention to the work on Masonic history by C.W. Leadbeater, who is seen as an authority in his field: ⁽⁹⁰⁾

«« After the Reformation in England, ecclesiastical architecture practically ceased as an activity of the guilds, and the operative lodges fell into decay since their work was no longer needed. But while the Reformation thus injured operative Masonry, it made Europe safe for the re-emergence into comparative publicity of the speculative art (the gnostic deliberations). The guilds had always accepted rich and influential patrons, and there was nothing new in the introduction of theoretic Masons into the lodges. (...) Between the period when operative Masonry was at the height of its power and inspiration and the revival of the speculative art at the beginning of the eighteenth century (after the inauguration of the Mother or Grand Lodge in 1717), there was a dark period in which the light of Masonry, both operative and speculative, seemed almost extinguished. (...) It is during this post-Reformation period

when the old lodges had almost forgotten the glory of their heritage, both operative and speculative, that we first find actual minutes of lodge meetings. These minutes show the condition into which the craft had fallen at the time; they are, as we should expect, almost silent upon all questions of ritual, secrets and symbolism, although there are occasional indications which point to the concealment of a hidden tradition. (...) The oldest lodge minutes extant are contained in the records of the lodge of Edinburgh, Mary's Chapel, the first mention upon the roll of the Grand Lodge of Scotland, and are dated 1598. (...) On it, the signature of Boswell is followed by his mark, a cross within a circle - a symbol often used by the brethren of the Rosy Cross, and bearing a profound meaning in connection with their mysteries. One of the earliest references to the Rosy Cross in Great Britain occurs in Scotland and in connection with Masonry; for in Henry Adamson's "The Muses' Threnody" - dated Perth, 1638 - we find the words: *"For what we do presage is riot in grosse (several years before the country plunged into Civil War), for we are brethren of the Rosie Cross. We have the Mason Word and second sight. Things for to come we can fortell aright."*

The Rosicrucian Manifestos, which are the first literary memorials of the order, written circa 1614, were not translated and published in English until 1652, when Thomas Vaughan, the celebrated alchemist and mystic, who wrote under the name of Eugenius Philalethes and had by now become an adept of the White Lodge, undertook the task. So as early as 1638, Masonry was associated with the Rosicrucian Brotherhood (...) As the years passed by more and more non-operatives were admitted into the Scottish lodges until the speculative element entirely dominated. (Evidently, the progress of infiltration was swift, and so we can read:) Dr. Robert Plot's "Natural History of Staffordshire", published in 1686, states that the admission of Masons chiefly consists in the communication of certain secret signs whereby they are known to one another all over the nation. He also speaks of a large parchment volume they have amongst them containing the history and rules of the craft of Masonry. (In the same work) he also refers to the adoption of Sir Christopher Wren as a Freemason. »»

The book in question, written by Philalethes, or Thomas Vaughan, is called "Fame and Confession of the Fraternity of R: C: " (of the Rosie Cross), originally printed in London in 1652. It is regarded as the foundation of all Rosicrucian writings, but was so composed as to give an innocuous statement to the outside world. The second Manifesto is the legend of Rosenkreuz, the presumed founder of the Rosie Cross movement and it was published in English much earlier. As early already as 1616 a translation appeared by the alchemist Robert Fludd, *"whose further writings were yet another important source for Newton"*.⁽⁹¹⁾ Vaughan was the 4th successor to Fausto, from 1654 to 1678. Désaguliers, the 8th from 1712 to 1744. Vaughan was also known under name of Citizen of the Universe or Cosmopolitan, because of his incessant travels.

F. M. Price says in the Introduction of the present edition of "Fame and Confession" (p. 11):

«« Perusal of the Fama & Confessio makes clear that the object of that work may be more correctly defined as the establishment of a new society in tangible form and in the world of affairs, and not as a mere enlargement of the old ideal brotherhood. (...) A study of all the editions (which differ considerably) will show that there is definite evidence from first to last of a controlling intelligence, a methodical development and a reasoned purpose. (...) Their evidence strongly supports the view that the attempt to establish a Fraternity was meant seriously. (...) The documents point beyond doubt to the co-operation of more than one person and not to the authorship of a single individual; in other words, that the Fraternitas R.C., or a nucleus of such a Fraternity, did exist. »»

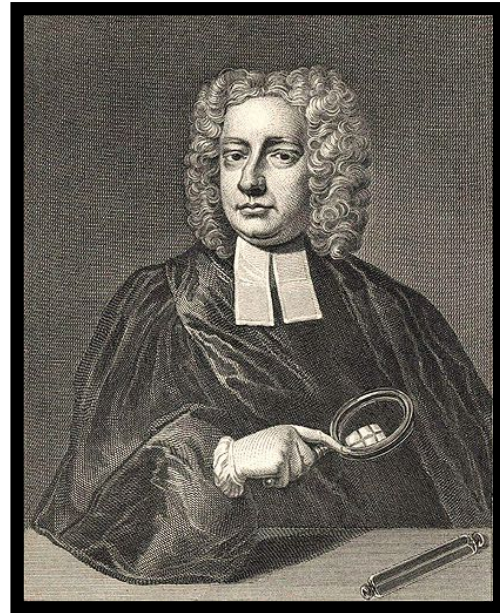
10.2 – Désaguliers' link with Newton

Nothing indicates that Newton belonged to the little cenacle of perfect initiates, whose leader was Désaguliers, but he definitely shared their views. At least Désaguliers and Newton shared a hatred for and disgust of the Roman Catholic Church, viewed as the personification of the whore of Babylon for whom the day of reckoning was nigh.

⁽⁹²⁾ Newton was a Puritan by upbringing and for him this kind of thinking was not out of character.

⁽⁹³⁾ (Puritanism was a radical way of thinking within Protestant denominations.) In addition Newton was an antitrinitarian. Newton wrote a booklet on his antitrinitarian view under the title "Origins of Gentile Theology" that was published more than ten years after his death. John Locke, the famous philosopher, tried to persuade him to publish it during his lifetime, but he was afraid to do so. Yet, Newton did not hesitate to use "One Holy God" as his pseudonym. Locke was an early Freemason. In "An Essay Concerning Human Understanding",

written in 1690, in its Epistle to the Reader, he describes himself *"as an under-labourer in clearing ground a little (...) employed (in the company of) master-builders (...) in an age that produces such masters as the great Huygenius and the incomparable Mr Newton."*



John Theophilus Désaguliers

Remarkably, Michael White in his well-documented book on Isaac Newton ⁽⁹⁴⁾ not only once mentions Désaguliers, perhaps to obfuscate Newton's link with Freemasonry that evolved from Rosicrucianism. He does mention in the margin of page 118: *"According to some scholars of the occult, the Rosicrucians may still exist in transmuted form. Some argue that they continue to influence world politics in a clandestine fashion, but ultimately more divisively than their largely ineffectual ancestors."* So, Michael White knows! It is from a Freemasonic website on the topic that I found the following, so his affiliation with Newton is to be taken as an established fact:

«« In 1713, Désaguliers is ordained minister of religion. That same year he marries Jeanne Pudsley and one year later moves to settle at Westminster where he is the first master of conference to speak about sciences. It is the time during which he ties himself in friendship with Newton, who becomes the godfather of one of his two sons. Désaguliers dedicates himself with Newton, whose assistant he was, to various experiments in physics, notably the one which consists in dropping glass globules from the top of the dome of St. Paul's Cathedral in London, which enabled him to write an article entitled 'An Account of Some Experiments done on 27 April 1719, to find out how much the Resistance of the Air retards Falling Bodies', published in the Transactions of the Royal Society.⁽⁹⁵⁾ He supports thus Isaac Newton in the redaction of the Corrigenda and Addenda of his Principia, in full 'Philosophiæ Naturalis Principia Mathematica'. »»

In 1998 a copy of the first edition was auctioned for the formidable sum of US \$ 325,000, equal to twelve times the yearly income of an employee, which indicates the importance our world attaches to this publication. It was also considered very important by Newton. Thus the omission of Désaguliers in the biography on Isaac Newton was deliberate. Both men were also member of the Hartlib Circle, which was a covert group, a kind of invisible college, that included many members

of the prestigious Royal Society. It offered a platform where alchemists and would-be magicians could meet to discuss their trade.

10.3 – The art of deception known as science

As a true daughter of its founding fathers, the Rosicrucian movement had strong pagan and anti-Christian leanings. Rosicrucianism has been defined as a sect that believes that all secret and sacred writings have truth in them, irrespective of their source, and must be judged by their inculcations rather than the source. Thus formulated, we have the royal road to paganism. The rights of God were not to be taken seriously and this is the tendency in all the ‘houses’ of our current society that have been taken over by the devious scientific spirit. This spirit is characterized by an atheistic cool-analytical approach, which has dissociated itself from any morality proposed to it from the outside. I am hinting at the Ten Commandments given to humanity from the realm of the so-called 5th dimension. The Ten Commandments are an affront to our modern mind. At best they are a laughing matter, surely if one understands that the revelation on Mount Sinai is something that genuinely took place.

Freedom would consist of trampling on anything which the Commandments prescribe. “Is it really true – the snake in Paradise sweetly asked – that you cannot eat from ‘all’ the trees in this garden?” The interpretation of this scene catches the eye: no freedom without transgressing the central command. But that is not freedom, that is pride. Our modern society can be construed as an anti-type to those Commandments, but covertly, in the way of the devilish trickster. If openly told, the opposition would be too great. The trickster has many disguises. This befits the imagery of the Trojan Horse and so the legend goes. Listen:

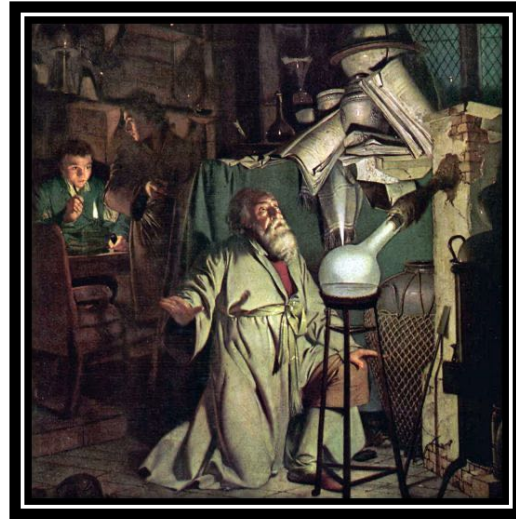
«« A man poised before the city’s gate and walls, dressed in a white smock, exclaims – as he points to the Trojan Horse: “*This is not a war-machine, this is Science, this is Art.*” The Trojan Horse represents the art of deception and the science of warfare, indeed, and it is the appearance of artistic expression and the appearance of the science of the intellect that conceal the war-machine. When in the first degree oath a mason apprentice swears to ever conceal and never reveal any part or parts, art or arts, point or points, of the secret arts and mysteries of ancient Freemasonry, it is apparent, even to the apprentice, that it is not the ‘art’ of Michelangelo nor that of Vincent van Gogh, which is implied. One of the guises or clandestine vehicles under whose cover spiritistic practices were perpetuated was known at the time as alchemy. The epitome of the science that was brought about by alchemy, served, as it still does, as a guise for its true intent. The alchemical experiments served for the initiates as an adroit masquerade, a Trojan Horse ‘vehicle’ on the European soil that was hitherto dominated by the Roman Catholic Church, to perpetuate the thinking that was alien and inimical to the Christian spirit. Here, the link between modern science and alchemy is clearly shown. »» ⁽⁹⁶⁾

10.4 – The crushing of the Venice conspiracy

The “Oxford Dictionary of World Religions” (1997) states that when to a large extent alchemy was driven underground, this resulted in the birth of Rosicrucianism. This is true. Obviously the writer had the movement in mind before it became less covert in the year 1617 and beyond, which implies that it was already a movement previously. This was the year that the Convent of Seven decided to make public the dreamt up story of Christian Rosenkreuz, the so-called founder of the Rosicrucian movement. The mystery religions, of which alchemy was the offspring, were targeted by the Roman Catholic Church in what they considered a never-ending struggle, which in the ‘Day of Reckoning’ would culminate in the one struggle of apocalyptic proportions. We can read about these kind of

things in the report of Abbé Lefranc,⁽⁹⁷⁾ who reported that in 1546 Lælius and Darius Socinus, together with a number of other heretics, had to flee the Republic of Venice in haste, where they had taken up residence, after its patriarch had decided to punish most severely those men who taught that the mysteries of the Christian religion appertain in doctrinal matters to the Greek philosophy and not to faith. Those men wished to open in a clever fashion the gates to paganism and all its debauchery. The patriarch was right!

At an alchemical convent, known as the Collegia Vicentina (Vicenza Colloquia), in the Diocese of Venice, the participants greeted each other with 'ave frater' and 'rosæ crucis'. It was 1546, a time when the Lutheran movement in the Nordic countries was in jeopardy. A plan of action was called for! The conspirators swore to subvert and finally destroy the Roman Catholic Church by means of false doctrines and secretive means and to set up a society to that effect, whose members would conceal that they belonged to that society, but would say that they supported the 'unitarian philosophy', which is an allusion to the denial of the Holy Trinity as well as to their grand but perfidious design of the unification of all the Christian sects, foreign creeds, mystery religions, esoteric cults and gnostic systems. The birth of the alma mater of religions, known today as Freemasonry, can be accredited to that ill-fated meeting. Soon after hearing of the conspiracy, the Republic of Venice seized upon Gulio Ghirlanda di Trévisé and Francisco di Ruego and they were strangled. Even if Voltaire, that eloquent genius of the anti-Christian sect, had travelled back from the future he could not have helped them out.⁽⁹⁸⁾ Those heretics, who escaped, sought refuge in different parts of Europe and this is one of the reasons why their ideas spread all over the continent.



Lælius (Lelio Sozzini), the leader of the conspirators, gained fame amongst the main leaders of the Reformation, whom he knew personally and most cordially. While in his prime he died in Switzerland, in the year 1562. By then he had made his reputation by having desecrated the mystery of the Holy Trinity, in a revival of the Arian heresy,⁽⁹⁹⁾ considered to be one of the most horrific heresies by both the Roman Catholic and Protestant Churches. Furthermore, having denied the reality of original sin, he removed the need for God's sanctifying grace and the holy priesthood, and it made dead wood of the Sacraments. The young Fausto, while in the country at the time of his uncle's death, on May 14th 1562, went straight to Zurich to obtain the papers and effects of his relative, by which he became the de facto leader of the movement.

10.5 – That ill-fated meeting of 1546 happens to be the alma mater of Freemasonry

Alma mater is Latin for 'bounteous mother' and a transcription for Mother Lodge. A different transcription would be 'great whore'. That denomination is not far-fetched in the light of the literature circulating in Masonic circles. Separately you will find a list of the writings of the great Arthur Edward Waite, who published in 1921 the New Encyclopedia of Freemasonry and of cognate instituted mysteries, also named the Ars Magna Latomorum. The list shows that Freemasonry has remained faithful to the pagan principles of its founding fathers, as explained here above.

Freemasonry does not like to be reminded of its foundation year 1546, even in its own circles, because this ignominious start of their movement in a recognisable form is considered a defeat, ...and defeated they will be! Their link with the ill fated meeting of Venice must be obscured to prevent the true objective and plan of action of the organisation being known to the lesser individuals. Amongst themselves the Freemasons ascribe the beginning of their movement to the year 1597 when, according to lore, Satan in person anointed Fausto as the Rosæ Crucis Magister Imperator, a ridiculous title! At the end of his life Désaguliers, gone mad, used to dress as a clown. That served him right, for Freemasonry relishes clownish names. The year 1597 has a symbolic meaning. Remember, the story tells that the light of Rosenkreuz was going to shine after 120 years; added to 1597 brings us to 1717, the year of the foundation of the Mother Lodge. The legend of Christian Rosenkreuz was published in 1615 by Johann Valentin Andreae, the 3rd successor to Fausto, in a book called *Fama Fraternitatis Rosæ Crucis*, which shows that already then they were plotting to reveal themselves in 1617 to the outside world.

This kind of planning reinforces the (false) idea that Freemasonry is an irresistible power. That this would be effectuated by means of a systematic infiltration and transformation of the Masonic guilds was not decided upon until the English Civil War that, take note, was conspired for a great deal by the Rosicrucians, Oliver Cromwell himself being a Rosicrucian and of course a Puritan. A tragic act during the disturbances was the beheading of William Laud, Archbishop of Canterbury, done by Thomas Vaughan on Tower Hill on January 10, 1645. By special 'favour' of Cromwell, Vaughan replaced the common executioner at the very last minute. His was an act of vengeance on account of the important steps Laud had taken for a re-integration of the Anglican Church with the Roman Catholic. When his head fell, Vaughan murmured, proudly recorded in his own diary: "*Bona Lucifero justicia*" (the verdict of good Lucifer). It was also Vaughan who ordered and planned the absorption the Free Mason Guilds, and it was he who designed the first rituals of accepted Masons. He is therefore regarded as the founder of (speculative) Freemasonry and he is held in high esteem.

10.6 – Called Christian but without Christian faith, or hope, or love

Lælius found in his nephew a shrewd defender of his opinions, who from then on became the leader of the sect. I now quote from the sublime writings of Mgr. Dillon, who was the Missionary Apostolic to Sydney: ⁽¹⁰⁰⁾

«« The success of Faustus Socinus in spreading his uncle's theories was enormous. His aim was not only to destroy the Church, but to raise up another temple into which any enemy of (christian) orthodoxy might freely enter. In this Temple every heterodox belief might be held, (while they entertained an implacable hatred against the Evangelical élan). It was called Christian but was without Christian faith, or hope, or love. It was simply an astutely planned system for propagating the ideas of its founders; for a fundamental part of the policy of Socinus, and one in which he well instructed his disciples, was to associate to Unitarianism the rich, the learned, the powerful and the influential of the world. He feigned an equal esteem for Trinitarians and anti-Trinitarians, for Lutherans and Calvinists. He praised all undertakings against the Church of Rome, and working upon the intense hatred for Catholicity of the proponents, caused them to forget their many 'isms' in order to unite them for the destruction of the common enemy. When that should be effected, it would be time to consider a system agreeable to all. Until then, unity of action inspired by hatred for the one Roman and Catholic Church should reign amongst them. He therefore wished that all his adherents should 'call' one another brothers – to 'treat' one another as such strikes up a different song – whether they be Lutheran, Calvinist, Moravian Brothers or whatever; and

hence his disciples have been recruited from a wide range of groups while keeping their former affiliations unharmed. »»»

The tendency to encompass all religions extends to the search for knowledge. To see how this is brought off, we turn to Albert Pike,⁽¹⁰¹⁾ who was the worldwide leader of the Masonic movement in the second half of the 19th century. In his words *“the calm, clear light of natural human religion, revealing to us God as the Infinite Parent of all (...), shines beautifully, above the great wide chaos of human errors. Beautiful around stretches off every way the Universe, the Great Bible of God.”* Based on an idea advanced by Francis Bacon, the Bible in the Masonic ritual is the second book of God, which signifies the universe, nothing but the universe. Pike continues: *“Material nature is its Old Testament (...) and Human Nature is the New Testament from the Infinite God, every day revealing a new page as Time turns over the leaves.”* Here, the exhibiting of new pages means no more than the increased understanding of the workings of nature. Earlier in his book he said:

«« There is a mere formal Atheism, which is a denial of God in ‘terms’, but not in ‘reality’. If a man (a Freemason) says: “There is no God”, that is, no God that is self-originated, or that never originated (...) it implicates that the order, beauty, and harmony of the world of matter and mind **do not indicate any plan or purpose** of Deity (the deity here is God depersonalized and actually an insult). But, says a man (a Freemason): “NATURE – meaning by that the whole sum-total of existence – (...) is the cause of my own existence, the mind of the Universe and the Providence of itself.” In such cases, then, the absolute denial of God is only formal and not real. The ‘qualities’ (or material and tangible expressions) of God are admitted and affirmed to be real (and, yes, nothing else is accepted to be real), and **it is a mere change of name to call the possessor of those qualities ‘Nature’ and not ‘God’.** »»»

Compare this with the Masonic idea of the nature of wisdom, such as has been formulated by Pike, who maintained that *“the wisdom of man (which means knowledge) is but the reflection and image of that of God”*, and we come to understand why for Masons the religious quest is the same as the quest for knowledge or scientia and, in extension, why in the unification of all religions – except the Roman Catholic, man should strive for the unification of all knowledge. The temple of Freemasonry is merely a temple to receive knowledge about the laws of nature and their modern temples are, therefore, our Scientific Research Institutes.

10.7 – Pure scientia, totally robbed of its higher educational aims

In light of the foregoing it is quite natural that Comenius expressed the view that there had to be a church uniting all religions in the ‘unum necessarium’ of which a good education was the surest way to its fulfilment. He was amongst the seven ‘perfect initiates’, gathering in 1617, which makes him one of the important leaders of the anti-Christian sect, and so his views bear upon the matter in hand. He preached that in numerous schools men were to be formed into images of the perfect man after Christ, to be effected by the ‘pansophia’, a concept that embraces all elements of divine wisdom (read: scientific knowledge), which is not what we commonly understand by the formation of the perfect man known to us from the Bible: (1 Cor. 2:6, Eph. 4:13, Col. 1:28)

«« We speak wisdom among them that are perfect, yet not the wisdom of this world. (...) Till we all come in the unity of the faith and of the knowledge of the Son of God, unto a perfect man, unto the measure of the stature of the fullness of Christ. (...) Teaching every man in all wisdom, that we may present every man perfect in Christ Jesus. »»»

It is pure scientia, totally robbed from its higher educational values to make humans pleasing to God. What is the sense of encyclopædic knowledge if not put to its proper use? To appreciate sound principles of education we could turn to Melancton (†1560). He, in his turn, found inspiration in

men like Cicero. For sure, the principles of good education have not fallen out of the sky. The educator, Melancton professed, is faced primarily with a moral-pedagogical task wherein he tries to combine moral virtue and knowledge in the minds of his pupils.⁽¹⁰²⁾ Look at our present school system, in the 21st century, geared to the teaching of scientia, no more no less. It took a long time to get there, but finally we have come to that lamentable state of affairs. Comenius would have been proud of it. He is justly called the father of pedagogy.



Czech bank note depicting Comenius

The Christ-figure of Comenius accords with the Platonic ideal in heaven and is just another cloak for Monophysism, known also as the Nestorian heresy. Who disagrees with this line of thought should read his *Lux in (or 'e') Tenebris* (Light in Darkness), a book with wide-ranging implications, first published in 1657 in Amsterdam, with an expanded edition published in 1665 in Leiden, together with the voluminous *Historia Revelationum*, the latter written to prove the authenticity of the revelations. It concerns prophecies and visions in the mood of the end of times, provided by Christoph Kotter, Christine Poniatowska and Mikuláš Drabik. Quite a number were sold to Jansenists despite the fact that many considered it dangerous literature. (Jansenism has been typified as the Protestant movement within the Roman Catholic Church.) In 1656 Comenius was exiled to Amsterdam, where he died fourteen years later in the arms of Thomas Vaughan, a figure we will come back to later on.

In Comenius' writings on the principles of education, his god is a rather vague and poorly defined label. He gives lip service to the generally accepted view when he recommends that in a school system the development of the character of the pupil along Christian lines was to be its ultimate aim. He was the antithesis of Christianity: for him, Moravian Brother and 'perfect initiate' of the Rosicrucian order, the Papacy should be destroyed at any cost. This is written in his *Pansophia*, (title in full: *Prodromus Pansophia Universæ*), translated at the time from Latin into English by Samuel Hartlib (published in 1639 in London). He predicts in the same work that this will be done by "a great international association of enlightened men, moved by a just spirit, enemies of the sacerdotal fanaticism, who will construct a temple of all wisdom, according to the plans of the Great Architect of the Universe himself". Here, for the first time in history, the term 'Great Architect of the Universe' is used, of which the Freemasons have come to be so fond.⁽¹⁰³⁾

I would like to stress that there is a great difference between the Architect of the Universe and the God of the Bible, the God who is Creator. The first words of the Bible read: "In the beginning God created the heavens and the earth." A beginning implies that there is a point when there was nothing except God Himself who, as we know, is spirit; but says Albert Pike: "(...) nothing is produced from nothing, (...) because existence can no more cease to be than nothing can cease to be. To say that the world came forth from nothing is to propose a monstrous absurdity. Everything

that 'Is' proceeds from that which was, and consequently nothing of that which is can ever not be." (104) If we turn to Albert Mackey's Encyclopedia of Freemasonry from 1909 and look under the heading of "Great Architect of the Universe", we see: "It is important to note that the Masons call their deity an 'architect' God rather than a 'creator' God. Human architects do not create anything. They design buildings for the contractor who will take already existing materials to build their structures." Reflect on this and let us not be naive about the aims and designs of a certain Czech named Amos Komenski, alias Comenius! (105)

"Lux in Tenebris" expounds a very dangerous teaching

In Comenius' biography, very competently written by Professor Anna Heyberger, the author quotes a Huguenot and contemporary of Comenius in her discussion of "Lux in Tenebris": «C'est là une doctrine très dangereuse en ses suites, aisée à retomber sur nous et fort peu concordante au fond avec la douceur et l'esprit de l'Évangile.» (This is a very dangerous teaching as regards its consequences, which may easily affect us, and is actually hardly in agreement with the gentleness and spirit of the Gospel.) She furthermore confirms the Rosicrucian affinities of Comenius by the following remarks (p. 45): «L'auteur dont il subit le plus profondément l'influence est Johannes Valentinus Andreae, 'fervidi spiritus et defœcatœ mentis vir' dont il ne cesse de parler avec une touchante reconnaissance, car Andreae 'a réussi à éclairer toutes les erreurs de la vie humaine'. Comenius le prie de lui compter parmi ses admirateurs, DISCIPLES et FILS, et Andreae à son tour l'encourage dans ses recherches pédagogiques.» (The author whose influence affects him the most is Johannes Valentinus Andreae [the one who published Fama Fraternitatis Rosæ Crucis] 'a fervent mind entertained by a very courageous man' of whom he does not stop talking with touching gratefulness as Andreae 'managed to correct all the faults of human life'. Comenius asks him to be counted amongst his admirers, DISCIPLES and SONS; in his turn Andreae encourages him in his pedagogic pursuits.) Finally, she points out (p. 305) that in his autobiographical work, called Labyrinthe, Comenius confesses – by mouth of the pilgrim – that he visits alchemists and assists at the Fraternity of the Rosie Cross.

"J. A. Comenius, sa vie et son œuvre d'éducation" by Anna Heyberger - Paris # 1928.
This is a standard work on Comenius' life.

10.8 – Comenius, a swindler and a real confidence trickster

I know that I have offended not a few who hold Comenius in high esteem for his supposed contribution to human society. He is regarded as one of the six greatest men in Czech history. His contribution to modern education in our world is highly valued. Moreover, he is seen as the first one to have defined the need for an institution very much comparable to that of the United Nations. To underline my point of view on a certain Czech named Amos Komenski, I would like to quote from "Le Dictionnaire historique et critique", written by Pierre Bayle (1647-1706), a contemporary of Comenius (†1670). This dictionary, that was reprinted in 1995 by Slatkine, marks the zenith of intellectual accomplishment by one of the great minds of the seventeenth century. Bayle stood in his time at the heart of the European intellectual debate. He was a free thinker and famous Protestant philosopher. His highly acclaimed dictionary gives a sceptical analysis of the prevalent philosophical and theological arguments, and came to be influential in the 18th-century Enlightenment circles. The author always went to great lengths to study his subjects and gained his facts by meticulous comparison and interrogation of the original sources. His monumental work has been called the Arsenal of Lights and was also translated into English and German. I quote from the third edition printed in Rotterdam, the town where he was forced into exile in 1681 and where he lectured until 1693, being dismissed following the accusation that he was an agent of France and an enemy

of Protestantism, both of which were ridiculous claims. He was certainly well positioned to appraise Comenius. Here is what he says (under 'Comenius', éd. 1720):

«« The reform of schools was not his main obsession: he dressed himself up in prophecies, revolutions, ruins, the Antichrist, the Thousand Year Reign and similar pieces of dangerous fanaticism. I call them dangerous not only with reference to orthodoxy but also with regard to the princes and the states. (...) In the first place, he is accused of enormous pride, and one perceives that it is the normal defect of those who pretend to have their inspirations from on high (in this case from below). In fact this favour is of such great price that we should not be surprised that those who believe that God honours them with a distinction of this kind should treat the common teachers with disdain. (...) The worst defect for which he is reproached is his fanaticism (...) He is accused, together with some other fanatical chiliastics (who think the end of times is nigh), of dedicating himself to raising up the nations and to have used all means at his disposal to incite Cromwell to promote revolutions in Bohemia. He found refuge (...) in Amsterdam, where he found extremely charitable people. The rain of gold that was showered on him in this city obliged him to stay there for the remainder of his days. (...) He was seen as a swindler and a real confidence trickster. »»

10.9 – The negation of God is construed in terms of a building

People generally agree that science is “purely” a voyage of discovery and no more. In Percy Shelley’s “Hymn to Apollo” this is exemplified by the verse: *“I am the eye with which the Universe beholds itself and knows itself divine.”* Here again, divine means something different to Christians. This verse is well known and admired, for Shelley is ranked as one of the great English poets of the 19th century Romantic style. Whether he earns that admiration is doubtful. His publication, together with a friend of his, of a widely distributed pamphlet on the campus, called “The Necessity of Atheism”, resulted in his being expelled from Oxford University at age nineteen. Atheism is not a mere convenience, it is the *conditio sine qua non* of a certain kind of scientific practice in the vindication of reason against so-called silly beliefs. As we have seen, the denial of God is construed in terms of an architect-god, who would have drafted a crude and imperfect plan of His piece of work “The Creation” (our universe), which Man needs to improve on. Spinoza, who in 1656 was excommunicated and cursed by the Jewish Council because of his views, did not see God as a separate being with attributes such as a will or an intellect. His is the architect-god, who did not create nature but is identified with nature itself. This now is the point of departure for science as it came to be and it makes that science is purely a voyage of discovery, as if human values play no part. No, no. Human values do play a part. The frame of mind and religious outlook of the practitioner determines the direction of his research and the way its results are applied, though instances exist where it is inconsequential. We may wonder about the seriousness of the medical establishment to device alternatives to vivisection. And, ...was it necessary to develop the atom bomb? Hiroshima, on which the bomb fell, was one of the most Christian towns of Japan. Verily, a fitting target for such a shameful contraption.

10.10 – The premise that our world and man himself need to be improved on

The adoration of Lucifer, which was the common business of the perfect initiates, is somewhat puzzling in view of the pledge of these great despisers that the material reality is the only one at their disposal. But satanists do not think in terms of pure spirit when they talk about Lucifer. Whereas a man is bound to his body, Lucifer can change forms, they argue. In their viewpoint he is but a being, limited to a place, and therefore not pure spirit. Albert Pike goes into the problem as follows:

«« The knowledge of the individual cannot pass beyond the limits of his own being. (...) The deity is thus not to be conceived - theoretically, but to be felt. (...) For the common understanding God is an incarnate divinity. (Not like Christ, hear:) Man's (...) imperfection in understanding (...) clothes the Inconceivable Spirit of the Universe in forms that come within the grasp of the senses and the intellect. Those forms are derived from that infinite and imperfect (material) nature (of our world). »»

Fausto declared that all knowledge had to come 'only' from sensual experience: "*Nam, ut dictum est a Philospho, nihil est in mente, sive in intellectu, quod non prius fuerit in sensu*", or "*For as Philosopher said: nothing is in the mind – which resides in the intellect, not being first in the senses*". ⁽¹⁰⁶⁾

In an inversion of values the Platonic ideal pops up again. Instead of "of our world" Pike writes "*which is but God's creation.*" Inasmuch as Pike dismisses creation as a "*monstrous absurdity*", the "of our world" (within brackets) seems more appropriate. Plato taught that the ideal world exists in an eternal, unchanging world of imaginings. The world, as we perceive it, would derive its expression from that higher world in a continuous effort of imitation. And since Plato conceived the tangible world made of imperfect material, this striving to would lead to an approximate and less valuable world of appearances when compared to the perfect world of imaginings. In an inversion Plato's imagined world, understood in this way, would be the real world and our tangible world subsidiary. Pike – together with the Freemasons of the higher echelons – in loco citato openly proclaims an imperfect world, which is in blatant contradiction with the Christian view that all was "*Good*", that powerful term to denote God's blessing, declared by God's hovering Spirit at the first day of creation after God said the creative Word: "*Let there be Light!!*" (Fiat Lux)

After the Fall, Man was not perfect any more, but the material universe stayed as always untainted and perfect. Masonic philosophy has filtered in the scientific way of thinking so characteristic of our age, denying the perfection and any purpose wedded to our existence. So Man, the lonely, navigates in a world to be improved on, where within its own shaky logic everything is permitted, and where each avenue lies there to be explored. In the practice of agriculture this is expressed by a total disregard for the ecology. The maltreatment and exploitation of our soil and environment cannot go on for ever. The same approach has also permeated the practice of medicine, where narrow-mindedness and greed ignores the real issue at stake, which is that "nature is the healer of disease" (vis medicatrix naturæ). Biogenetics would be just another branch of science, but it certainly is not; it is the sorcerer's apprentice at work. The dire consequences will have to be borne. It is just a matter of time for the bill to arrive, just a matter of time...

Notes

(90) Freemasonry and its Ancient Rites (also entitled Glimpses of Masonic History) by C. W. Leadbeater # 1926. Quote from chapter IX under 'The Reappearance of Speculative Masonry' etc.

(91) "Isaac Newton, the Last Sorcerer", Michael White – Fourth Estate, London # 1997 (p. 121).

(92) Newton's religious views are expressed in his extensive religion notebooks and others.

(93) Also Thomas Vaughan, the Rosicrucian, considered himself a Puritan. He befriended Reverend John Cotton who headed the Puritans in Trimountain in the U.S.A. Cotton is the one who changed the name of the town into Boston.

(94) "Isaac Newton, The Last Sorcerer", Michael White – Fourth Estate, London # 1997.

(95) One of the conclusions of Newton's experiment of falling bodies in air was that the same shape and relative weight result in the same acceleration. This seems unrefutable. However, a metal ball that is magnetic has a different acceleration than a non-magnetic metal ball of the same size and weight, whether it falls in air or in a vacuum.

(96) Reference: These quotes were excerpted and adapted from chapter 6 of Sonny René Stermole's book "America's Subversion: the Enemy Within".

(97) See: Le Voile levé (The Veil lifted) by Abbé Lefranc, murdered on Sept. 2, 1792, on the first day of the Reign of Terror, at the start of the French Revolution (1789 is symbolic that refers to the Glorious Revolution in England). Already Abbé Lefranc knew of the Venice conspiracy.

Voltaire's relentless war against the cause of Christ

(98) From Mgr. Dillon's book (see two entries later) I would like to share the following on account of Voltaire (1694-1778) (p. 4):

«« It was in his day and by his means that the Atheism, which occupies us this evening, became perfected, generalized and organized for the destruction of Christianity, Christian civilization and all religion. He was the first and remains still the greatest of its apostles. There is not one of its dark principles which he did not teach and advocate. And from his writings and by their means, the intellectual and every other form of war against the Catholic Church and the cause of Christ are carried on to this day and will be to the end. »»

The Arian heresy

(99) Arianism is the fourth-century error that denies the full Divinity of Christ, so called after its author, the Libyan presbyter Arius. It led to such controversy in the Church that Emperor Constantine decided to convene a general Council in Nicæa: the doctrine was rejected and Arius banished to Illyricum. Less than two years later, Arius presented a new formulation to Constantine that was accepted, but he died shortly before his reinstatement as a presbyter in Alexandria. Nonetheless, the damage was done and caused havoc in the Church. Cardinal Newman has given a splendid description of the consequences of the Arian crisis:

«« The body of bishops failed in their confession of the Faith (...) They spoke variously, one against another; there was nothing, after Nicæa of firm, unvarying, consistent testimony, for nearly sixty years. There were untrustworthy Councils, unfaithful bishops; there was weakness, fear of consequences, misguidance, delusion, hallucination, endless, hopeless, extending into nearly every corner of the Catholic Church. The comparatively few who remained faithful were discredited and driven into exile; the rest were either deceivers or deceived. »» ("On Consulting the Faithful in Matters of Doctrine" by John Henry Newman, Sheed & Ward - Kansas City, 1961, p. 77)

(100) Reference: "Freemasonry Unmasked", first called "The War of Antichrist with the Church and Christian Civilization", based upon a series of lectures delivered in Edingburgh in Oct. 1884 by

Monsignor George F. Dillon D.D. Reprints can be ordered from the Christian Book Club, P.O. Box 900566, Palmdale CA 93590, U.S.A. Quote, with slight variations, from pp. 12-13.

(101) Reference: “Morals and Dogma” by Albert Pike # 1871. In a 2002 reprint it states on the front: “*Albert Pike, the greatest and most maligned Freemason that ever lived.*”, which shows his repute both inside and outside the movement. (pp. 715, 643-44, 251) Between brackets, as always, are additions to the quote. The emphasis in bold is mine.

(102) I would like to recommend the excellent article by Henk Dijkgraaf on the educational principles as set out by Philipp Melanchton, published in May 2007 in “Bitterlemon”, a Dutch periodical. The full article is freely available on SCRIBD with kind permission of the author. See: “Melanchthon’s ideal of piety and erudition”.

(103) In *Morals and Dogma*, p. 615, Albert Pike reports that “*the third Chinese Emperor erected a Temple, the first probably ever, to the Great Architect of the Universe.*” Whether this was known at the time of Comenius I sincerely doubt and whether true, I do not know.

(104) “Legenda of the Ancient and Accepted Scottish Rite” by Albert Pike # 1888; quote from the Introduction p. 109.

Comenius covered his tracks

(105) Although Comenius participated in the “The numbering of the perfect initiates” and is thus to be considered a Socinian or Rosicrucian, he wrote a few booklets condemning Socinianism, apparently to conceal his true intent, as to evade opposition. The perfect initiates also called themselves the invisibles, which inspired the name Phila-Lethes, meaning ‘love of being forgotten’, the Lèthè being the legendary river in Hades from which the dead could drink to lose the memories of their earthly existence. Comenius’ anti-Socinian literature is found in “*Bibliographia Sociniana*”, compiled by Philip Knijff & Sibbe Jan Visser - Uitgeverij Verloren, Hilversum # 2004 (nrs 4127-4133).

(106) Ibid BFP, Vol. 2, p. 296.



The Ascent of Man and Science *in confrontation with the* *Mysterium Coniunctionis*

This is the final chapter in our search for the path of the ascent of science. Starting with Ancient Greece we followed the tracks of the sleepwalkers, of those men who, often clumsily, tried to grasp the perplexities of life, until they had finally come at early modern science, whose proponents failed to see reality as more than a concoction of lifeless things. For sure, the Mysterium Coniunctionis would be a relic of the past, a concept that once belonged to the errant ways of those sleepwalkers. But no, it 'is' relevant, for the Mysterium denotes the limits of our quest for knowledge. It tells us to be humble. Bonaventura stressed: "Like a stained-glass window, creation is translucent; its significance can be read only because of the divine light that permeates it, making it reflect a source beyond itself." From this standpoint, the present ways of science can and must be improved, be made more dignified and true to its divine calling.

**A splendid essay on the relationship between faith and reason
was given at the First Vatican Council :**

Even though faith is above reason, there can never be any real disagreement between faith and reason, since it is the same God who reveals the mysteries and infuses faith, and who has endowed the human mind with the light of reason. God cannot deny himself, nor can truth ever be in opposition to truth. (...) Therefore we hold that every assertion contrary to the truth of enlightened faith is totally false. (...) Not only can faith and reason never be at odds with one another, but they lend a helping hand to each other because sound reasoning displays the foundations of faith and, with its illuminated light, cultivates knowledge of divine things, while faith frees and protects reason from errors, well enriching it with knowledge of various kinds. Hence, so far is the church from hindering the development of human arts and studies, that in fact she assists and promotes them in many ways. For she is neither ignorant nor contemptuous of the advantages which derive from this source for human life, rather she acknowledges that the arts and studies flow from God, the Lord of sciences, so, if properly treated, they lead to God by the help of his grace. The Church in no way forbids that each branch of learning has its own principles and methods, but, having recognized this freedom, she takes particular care that they do not become infected with errors by conflicting with divine teaching, or overstepping their own bounds intrude upon what belongs to faith, and engender confusion. (...) May understanding, knowledge and wisdom increase as ages and centuries roll along, and greatly and vigorously flourish, in each and all, in the individual and the whole Church: but this only in its own proper kind, that is to say, in the same doctrine, the same sense, and the same understanding.

Constitutio dogmatica de Fide Catholica (ch. 4)
unanimously accepted at the 3rd session, Apr. 24 1870

How Alchemy evolved into Science (11) (17th century)

11.1 – A forbidden craft

Alchemy was an adroit masquerade, a Trojan Horse on European soil that hitherto had been dominated by the Roman Catholic Church, in order to perpetuate the thinking that was alien and inimical to the Christian spirit. Recognized as such, it was to a large extent driven underground. Hermeneutical works were clothed with a veil of mystery to escape the vigilance of the authorities. The alchemists developed their own jumbled language that had the semblance to elucidate, but could only be understood by the little circle of adepts. An enlightening correspondence exists between Aristotle and one of his pupils, a certain Alexander (this could have been the boy who was to become Alexander the Great): “*Know that my published discourses (acroamatic lessons) can be understood as having never been published, because they can only be understood by them who have heard them explain.*” Not surprisingly, many students of alchemy have not fathomed its true nature. One needs to scratch its shiny surface to show its true Art related to rationalism and unblended paganism, still prevalent in the Masonic Movement. This conceited enterprise does not construct; its architects demolish.

We followed the tracks of the Socinian-Alchemists until, in Poland, they were recognized as a great plague. Again they had to flee. To hatch their plot, the Fellows took advantage of the great hospitality and tolerant spirit so typical of Holland. It is important to follow the continuity of their intellectual endeavours after the Colloquia, for otherwise we cannot perceive how higher Socinianism equals Magical Alchemy and how both brought forth that special Craft still echelons of Freemasonry and related highest initiates now carry a little emblem of a rose without a cross (the trical design). Don't get me wrong. I am not saying that Freemasons still make gold from lead. They don't need to. The riches of the world are theirs, more than gold can buy.



Those ‘seemingly’ different flows have helped to shape the peculiar spirit of our age, of which science forms a part. Upon reflection we comprehend how everything falls under the heading of Greek thinking. From this angle we focused on the ascent of that mode of thinking throughout the millennia until we arrived at early modern science. What remains to explain is how magical alchemy evolved into science as it came to be.

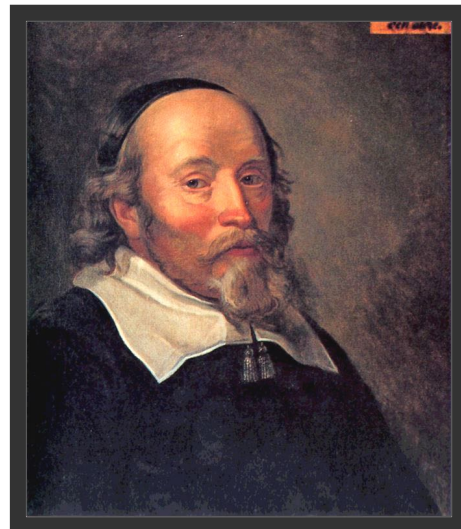
11.2 – Two kinds of science

Robert Fludd – described in the second edition of the Cambridge Biographical Encyclopædia as a physician, mystic and pantheistic theosophist – was in 1617 present at the Convent of Seven. We learn from the same encyclopædia that the year before he had written a treatise in defence of Rosicrucianism, the “*Apologia compendiaria fraternitatem de Rosea Croce*”. He happened to be the mentor of Thomas Vaughan and guided him in the occult Arts. His mysticism was based on the Jewish esoteric tradition, known as the Kabala. He was not only a physician, but was famed as an alchemist. His “*Collectio Operum*” is a standard work for today's people who are interested in alchemy. In this book his most famous diagram is the “Operations of Nature”. Arthur Waite, who is a great authority in circles of Freemasonry, explains that the Kabala is part

of the history of philosophy, and as such once entered into the thought of Europe. He furthermore proposes that it would be responsible, broadly speaking, for all that strange tissue of symbolism and ceremonial that made up the magic of the late Middle Ages, and that at a later period it sought to transform into alchemy.⁽¹⁰⁷⁾ Yet the alchemical practitioners did not consider themselves magicians but as men who sought to harness the powers of nature. That is why Fludd's magic diagram is called "Operations of Nature" and why Newton was looking for inspiration in his writings.

In his search for the philosophers' stone, the ordinary alchemist believed that the transmutation of metals was within his power. After a period of vexing trials, and once an alchemist was invited to become a highest initiate, he came to realize that there are two kinds of operation, one that could be exercised by human agents and one that needed an outside agent to do the work for him. Very importantly, both kinds were not considered contrary to the laws of nature. Saint Albert Magnus took the same position: that indeed a transmutation of some kind exists by means of natural processes which, however, is not accessible in the human domain. For the little cenacle of initiates, science proper consisted of gaining knowledge of what belonged to the human domain, while being aware that there was some form of science: the occult, a craft forbidden by that cursed institution of the Holy Roman Church, yet accessible via the veneration of that outside agent, the light bearer, the prince of Tyre named Lucifer.

In the blindness of their heart they practice the occult: *ad maiorem Satanis gloriam!* (to the higher glory of Satan) Yet, the perfect initiates did not call this creature Satan but "the good Lord" (*bon Iovi*), or more specifically Lucifer. How right spoke the apostle Paul in his letter to the Ephesians (4:18-19), that "*they have their understanding darkened, being alienated from the life of God, because of the ignorance that is in them, because of the blindness of their heart, who, being past feeling, have given themselves over to lewdness, to work all uncleanness with greediness.*"



Louis de Geer

The so-called philosopher's stone was not obtained through magic as is generally understood, but it is a material object handed over by a spectrum. That is the interpretation of the famous: "*I own the philosopher's stone, which I have not stolen from anyone, for I only got it from our God*", written in chapter 13 of "Introitus Apertus" by Thomas Vaughan, under the pseudonym of Philaletha Philosopho. These men did not call themselves magicians, but 'philosophers', for they knew the secret of how to obtain the 'philosopher's stone'. In the *Bibliotheca Fratrum Polonorum*, Fausto often calls himself in a self-gratifying way philosopher, aware that, normally, readers will not grasp its hidden meaning. In *Vitulus Aureus* (Golden Calf), Helvetius describes the philosopher's stone as having the colour of brimstone. Only a miniscule fragment would suffice, embedded in wax, to obtain an important quantity of pure gold, after it had been thrown into molten lead.

The dabblers, not worthy of admission to the little cenacle, were seen to imitate and corrupt the 'admirable wisdom' of the magi. Nonetheless, the many futile attempts to practice alchemy were helpful to get knowledge of science proper, though the philosophers' stone remained, as always, a mirage. This is how Louis De Geer, another member of the Convent of Seven, must have

gained insight on how to practice metallurgy, which he applied in the service of the war effort of the Swedish nation, employed amongst other things against Catholicism. One can say much about De Geer, but not that he was a dreamer. He was intelligent and a great organiser. He was a man of this world, yet combined magical alchemy with the 'savoir faire' of how to work ore, which brought him immense riches.

11.3 – Was Freemasonry originally a Jewish conspiracy?

As told, the occultism of the perfect initiate Robert Fludd was based on the Jewish esoteric tradition, termed Kabala. This calls into question the extent of the Jewish contribution to the Rosicrucian movement, the parent organisation of modern Freemasonry. Stated bluntly: "Was early Freemasonry the Jewish tool in their quest for world domination?" Indeed, much speculation has been going on about the importance of the Jewish presence (directly or indirectly) within the Masonic movement. There are indications that they became actively involved for the first time at the end of the 18th century, and it seems likely that from the latter part of the 19th century they acquired a dominating position. Following Masonic precepts, the Jews who would have been involved, were plotting against Christendom and also against their own kind. (see about the duality within Judaism in sections 5 and 6 of my article: "The Theological Roots of Jew Hatred") In their own minds these aims constituted higher ideals than the celebrated 'one world order', despite the fact that these are interrelated.⁽¹⁰⁸⁾ This is beyond our scope and I shall not consider it any further. There is not the slightest evidence, however, as concerns their possible earlier involvement, in the 16th and 17th century.⁽¹⁰⁹⁾ If the Jew had been involved at an earlier stage, the Polish king would certainly have discovered it and taken measures against the large Jewish community in his domain, but he stayed on friendly terms with them and on the contrary banished the Socinians under penalty of death. The connection between the Socinians and the Jewish 'school of thought' cannot be denied, but that does not prove their intense involvement.

Already the Gnostic Heresy had Jewish heretical connotations. This heresy, better known as the Valentinian Doctrine, is known to have merged the Christian doctrine with the gnostic philosophies. The initiator of this plan makes his appearance in the New Testament as Simon the Magician. (Acts 8:9-24) Because Simon came from Samaria, he must have been versed in the Jewish kabalistic philosophy. His pupil Valentine, at least, is described as a Jew. It is of interest that the Valentinian Doctrine is typified as the Egyptian Gnosis. The difference between the two is less than one might expect. A careful study of Kabala reveals elements of the primitive Egyptian gnosis. During their sojourn in Egypt, the people of Israel must have come into contact with aspects of the Egyptian mysteries, and the knowledge thus acquired could have passed down the generations in the same way as heathen beliefs have always found a niche within our Christian societies.

During his extended stay in Poland, the perfect initiate Faustus Socinus must have come into contact with the great realm of Jewish thought and he must have been fascinated by it, as many before. That will go a long way to explaining why, soon after he had died, the literature of the initiates is imbued with the wrong side of the Jewish intellectual tradition. Via them, many Kabalistic elements found their way into the Masonic ritual and way of thinking. That served, at a later epoch, as a standing invitation for a particular kind of Jew to join the Masonic cult. Notwithstanding, the Jewish Cabals have continued separately from the traditional Lodges, yet not without close cooperation with the Supreme Council of Freemasonry, with whom they share a hatred for both the Christian and Israelite cause.

Both causes, Christianity and Judaism, have in God's plan a common destiny. Those who, within the body of Jewry, oppose that destiny, are mentioned in the book of Revelation in less than

flattering terms: “*Here the First and Last loudly proclaims: I know the blasphemy of those who say they are Jews and are not, but a synagogue of Satan!*” (Rev. 2:8-9)

11.4 – The grand design of science to be

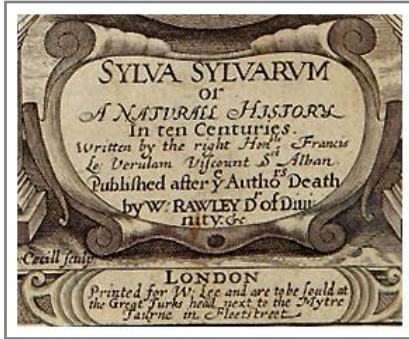
From the “Illustrated History of the Western and Eastern Philosophy” we learn that:

«« The platonic, hermetic and kabbalistic beliefs prevalent in the late fifteenth and the entire sixteenth centuries were adopted by various scholars: the German humanist Johannes Reuchlin (†1522), who introduced the Reformation theologians to the kabala; the mathematician John Dee (†1608), who thereby turned into an enthusiastic adept of the natural sciences; the Italian philosopher Giordano Bruno (†1600), who became – on the basis of animistic and magic theories – one of the greatest and most influential defenders of the Copernican view of the universe; the English philosopher Francis Bacon (†1626), who reduced occult and apparently magical powers to non-observable physical structures of objects in reality. »» (edited by Bor, Petersma, King - Amsterdam # 2004, p. 227)

We turn our attention to Sir Francis Bacon, Viscount St. Alban. For over two decades he was the leader of the British Parliament’s House of Commons. In 1618 he was raised to the function of Lord Chancellor, the highest public office in England, but that same year he had to resign after having confessed, probably at the express command of King James, to charges of corruption and bribe-taking. However, on January 30, 1621, he became a member of the House of Lords. He was a literary genius, devoted to writing. His most important brainchild was the large collection, called Shakespeare, which he created through the “The Knights of the Helmet” group.⁽¹¹⁰⁾

Bacon was the son of Queen Elisabeth and her lover Sir Robert Dudley, Earl of Leicester, who had known each other since early childhood.⁽¹¹¹⁾ Roger Ascham believed that his pupil Robert Dudley possessed a rare talent for languages and writing, including in Latin and, apparently, this same talent was given to Bacon. As an illegitimate son, Bacon was adopted by Lady Anne,⁽¹¹²⁾ who was in attendance at his birth, and who had recently lost an infant of her own. That Bacon was of royal descent and masterminded the Shakespearean works is corroborated by Alfred Dodd in “Francis Bacon’s Personal Life-Story”, a majestic book.⁽¹¹³⁾ This is also forwarded in “Bacon, Shakespeare, and the Rosicrucians” by W.F.C. Wigston # 1889. Alfred Dodd reveals that when King James took over the throne, Bacon, in order to save his head, wrote a letter to the King, delivered through the Secretary of State, wherein he renounced any ambition to the throne, and announced his intention to marry a commoner. According to Henry Pott, in his 1880 “Francis Bacon and his Secret Society”, it is rumored that Bacon did not at all die in 1626, but that he lived on, unbeknownst but to his closest friends, and that he would have died at a very advanced age. Henry Pott writes that Francis Bacon’s true burial place is unknown and he is reported to have died at four different locations at the same time. This has the elements of a set-up to propagate the fanciful legend that he died for ‘the world’ in 1626 and continued to live until the age of 106, just like the fabled Christian Rosenkreuz.⁽¹¹⁴⁾

Though his own scientific work was generally behind the times, it was his ideas and philosophies, that made him such an historical figure, particularly with regard to his insistence on the importance of observation and experiment. He stressed the merit of the inductive method over the deductive one and he therefore is also called the father of the modern experimental science, although that title actually belongs to William Gilbert († 1603). In my view, the significance of Francis Bacon lies primarily in how he established the function and operation of our scientific institutes. He was the one who devised the general plan of the prestigious Royal Society, the oldest scientific institute on earth.



Bacon is profoundly admired by Freemasons, who always have liked to see him behind the incognito of William Shakespeare. Though he did not participate in the Convent of Seven, he unquestionably belonged to the higher initiates of the Rosie Cross. Bacon is widely known for his Utopian book the New Atlantis. Not widely known is that it was also called “The Land of the Rosicrucians”. In “The New Atlantis” he named the last chapter, left blank: “The Second Philosophy or the Active Science”. This could be a code name for scientific alchemy as opposed to its magical counterpart. The tale was published very soon after

Bacon died in 1626 as the last part of “Sylva Sylvarum: or “a natural history in ten centuries”. Bacon’s personal secretary, William Rawley edited and published Sylva Sylvarum, to whom Bacon had bequeathed most of his manuscripts.⁽¹¹⁵⁾ The Latin title perfectly describes the structure of the volume: “a miscellany of topics”.⁽¹¹⁶⁾ More explicitly, it is an anthology of one thousand paragraphs consisting of extracts from books, mostly from antiquity, to which Bacon added his observations and the descriptions of his own experiments.

Many have concluded that he was prevented from finishing Nova Atlantis because of his untimely death. But Bacon wrote it several years earlier and the only valid conclusion, therefore, is that he deliberately left it unfinished. Actually, the last chapter can be seen as an alternative reading for the whole book (Sylva Sylvarum), heralding the beginning of the quest for experimental science of which the last chapter was still unwritten and waiting for its fulfillment.

If there is a second philosophy, what then is the first? The answer: magical alchemy, which - we learned - is produced by means of an outside agent, a kind of augur. The beneficiary of this craft is a recipient and as such someone who submits to ‘passive science’. The second philosophy, called the natural history, concerns the scientific investigation and its application (or Art) of what belongs to the human domain. That truly is an ‘active’ science. Natural history is to be rendered as ‘knowledge of nature’, from the fact that the Greek histos, which means loom, refers to the word ‘histor’, which means “he who holds knowledge (of how to work the loom)”.

In a utopian setting, Nova Atlantis presents the workings of a fellowship that by some facets strikingly resembles the British scientific institute of the Royal Society, at the time of its writing still far removed in the future. It was founded in 1660.⁽¹¹⁷⁾ In 1667, Dr Thomas Sprat published his “History of the Royal Society”. The frontispiece shows, amongst others, Francis Bacon. At his feet is the legend “Artium Instaurator” or instructor of the Art. In the tale, the place of action is the island Bensalem: “Son of Bensalem (...) the blessing of the everlasting Father, the Prince of Peace, (...) be upon thee.” And also: “We maintain a trade, not for gold, (...) but only for (the acquisition of) God’s first creature, which was light; to have light (or knowledge), I say, of the growth of all parts of the world.” Dr. Rawley in his address to the reader of Sylva Sylvarum comments on The New Atlantis part: “This fable my lord devised to the end that he might exhibit therein a model or description of a college, instituted for the interpreting of nature and the producing of great and marvellous works for the benefit of man, under the name of Solomon’s House or the College of the Six Days’ Works.” The College of the Six Days’ Works is an allusion to the biblical six days of creation, but now Man is doing the creative work. Bacon does not say that this college is to God’s glory, but to the ‘more’ glory God might have. Strange wording! The message is that by the application of science Man is going to improve on God’s work of creation. This arrogance has prevailed till this very day in the scientific establishment. The governor of the college calls himself a priest by vocation (not anointed). What Bacon wants to say is that the scientists will be the new caste of priests, and science our new religion, while he

makes it abundantly clear that this will be effected by a condominium that would suffice to extirpate all evil. In this condominium religion would be kicked out of the door — the seafarers said: “we ‘were’ Christians” — and scientific thinking would be welcomed as the new and only partner in the affairs of government. ⁽¹¹⁸⁾

Bensalem (son of peace) is the name of the island where it all happens, and is a messianic kind of name that reminds of the first verses of the prophet Isaiah, chapter 9 :

«**« The people that walked in darkness have seen a great light:** they that dwell in the land of the shadow of death, upon them hath the light shined. Thou hast multiplied the nation, and not increased the joy: they joy before thee according to the joy in harvest, and as men rejoice when they divide the spoil. For thou hast broken the yoke of his burden, and the staff of his shoulder, the rod of his oppressor, as in the day of Midian. For every battle of the warrior is with confused noise, and garments rolled in blood; but this shall be with burning and fuel of fire. For unto us a child is born, unto us **a son is given! And the government shall be upon his shoulder:** and his name shall be called Wonderful Counselor, the Mighty God, **the Everlasting Father, the Prince of Peace.** »»»

The Son of God is equated with the island Bensalem with the fruits of the scientific effort, the shining light. The Rosicrucian light, of course, is different from the Biblical light, for it concerns having knowledge of the operation of nature. The god of our present day scientists is the evil genus Lucifer, the light-bearer, for ultimately he is the inspirator of their blasphemous practice. The yoke to be broken in their eyes is, first of all, that of the papacy and anything Christian.

The Latin wording around the emblem on the cover of New Atlantis is “Tempora Patet Occulta Veritas”, or: “time will bring to light the hidden truth”, the emblem showing a devil who draws Pallas Athena out of darkness. And so we will look further into the meaning of the tale: By singular mistake, Bensalem’s stretch of land is found by seafaring wanderers somewhere in the Pacific Ocean, which contradicts the frontispiece of Thomas Sprat’s “History of the Royal Society” showing Bacon as the instructor of the Art. Bacon, always fond of riddles, thus hides the obvious that the island meant to harbour the Royal Art, or way of doing for the advancement of science, is Great Britain itself. After they had entered into a good haven, being the port of a fair city, the crew was invited to the strangers’ house. This name is symbolic for the university or ‘home of scientists’ on the island. The clue as to the meaning of the word stranger, so profusely used (21x), is Shakespearian: “*I know thee well, but in thy fortunes am unlearn’d and strange*”, and again: “*From whence you owe this strange intelligence?*” ⁽¹¹⁹⁾ Strange and the quest for knowledge are here related concepts. This play of words goes one step further. My dictionary defines stranger as someone who is not known for what he really is in a particular place or company, hence the word invisible, used for instance for the Hartlib Circle that called itself “The Invisible College”. (For an interpretation of The New Atlantis, see Appendix)



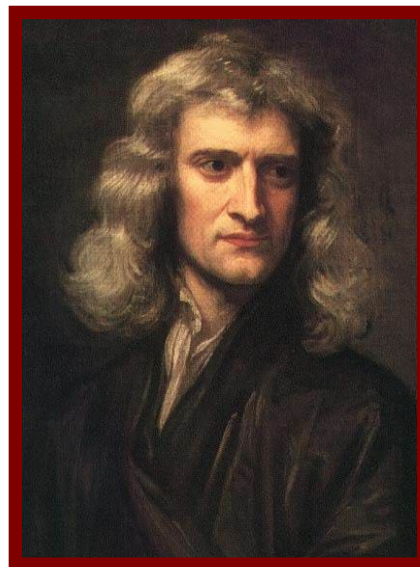
11.5 – The Hartlib Circle evolved in the Royal Society, vestige of modern science

At the preliminary stage, soon after Bacon had died, the acclaimed fellowship that was offering a meeting place for the like-minded, the cream of the cream, was known as the Invisible College, also referred to as the Hartlib Circle. The gathering aimed to rationalize alchemy by introducing the alchemical lore into a systematic discipline. This informal society, or circle, may thus be thought of as providing the link between vague, personalised alchemical practice and the founda-

tions of the empirical scientific routine. Distinguished members at its beginning were Thomas Vaughan, Sir Kenelm Digby and Robert Boyle. As well as being most certainly the ablest experimenter, Boyle was also the most accomplished natural philosopher of the group, a man who represented the ideals and philosophies of the circle in their most intellectual form. His “The Origine of Formes and Qualities”, published in 1666, was a distillation of all the Hartlib Circle had achieved during the previous two decades and provided Newton with an intellectual framework for his own alchemical explorations. ⁽¹²⁰⁾

The Invisible College was a title coined by Hartlib and Comenius. The term appears in Hartlib’s book from 1641: “A Description of the Famous Kingdom of Macaria - the blessed”, a utopian essay upon the necessity and excellency of education, addressed to the attention of the Long Parliament, and it appears in Comenius’ work written a little later, called: “The Way of Light”. What Comenius proclaimed as the ‘via lucis’, or way of light, was the pursuit of higher learning and the reformation of society bound together. He was prevented from publishing it by the English Civil War, but it was eventually published in Amsterdam, in 1668.

In it he says: “*We may hope that an Art of Arts, a Science of Sciences, a Wisdom of Wisdom, a Light of Light shall at length be possessed. (...) The schools of universal wisdom (the universities), advocated by Bacon will be founded.*” Hartlib would remain known as the publisher of numerous works written by others, though he himself wrote and published more than thirty tracts and treatises. He has been most influential as a communicator being described as an ‘intelligencer’, which is a person who acts as an agent for the dissemination of news, books, and manuscripts. He cultivated a vast network of correspondents. His refugee contacts in Central Europe served him well. He also acted as an agent for those seeking patents for new inventions. His importance for the furtherance of science in the first part of the 17th century was substantial.



Newton

The offspring of the earlier meetings of Hartlib and his circle of acquaintances in London and Oxford, starting in 1645, was “The Royal Society of London for the Improvement of Natural Knowledge”, of which Newton was to become an important participant and finally its president. Three hundred fifty years later, the Royal Society defines itself as the independent scientific academy of the United Kingdom dedicated to promoting excellence in science, while it plays an influential role in national and international science policy and supports developments in science engineering and technology in a wide range of ways. Currently, a Fellow of The Royal Society enjoys not only honour and respect, but great public credibility. They are truly the priests of our time. Similar honours and statuses in the United States and elsewhere carry similar public force.

The inception of that grand design, brazenly called in New Atlantis: “*the noblest foundation that was ever on the earth*”, nobler than Christ’s Church, yea “*the very eye of the kingdom of heaven*”, was to occur in 1660, year when the founders petitioned for a royal charter, fittingly situated at the centenary of Bacon’s birth. All the same, after having fulfilled its primary task in 1660, the Hartlib circle continued to exist, even after Hartlib’s death in 1662, consisting of a “*network of nameless adepts who kept alight the alchemical flame. These men operated covertly within the same city as the Royal Society of London and included many of their number.*” ⁽¹²¹⁾

The eye of the kingdom of heaven and the instructor of the Art

The expression 'eye of the kingdom of heaven' is from *The New Atlantis*: "*It so fell out that there was in one of the boats one of the wise men of the Society of Saloman's House, which house, or college, my good brethren, is the very eye of this kingdom [of heaven] (...) and it appertains to those of our order to know God's works of creation and true secrets of them.*" Salomon, son of the biblical David, was the one who built the Temple in Jerusalem, which is the Freemason's symbol of the industriousness of Man, and therefore to them a place to worship Man, not God.

In the tale the governor of the 'house of strangers', who is the figure of Bacon, says that "*this house is to lay up revenue for 37 years (...) the State will defray (...) and [when that happens the original circle will] stay no more*", which could mean that Bacon – believed by some to have written the tale in 1623 – in this way instructed that a royal charter was to be applied for after 37 years had passed, hence the year 1660. Conversely, this interpretation gives a clue as to the year the tale was written, if we are still in doubt of when it was written.

11.6 – Newton vis-à-vis the Hartlib Circle

In the final section I would like to devote some thoughts on Isaac Newton, again taken from Michael White's book (p. 140):

«« Newton may have contributed texts to the network of the Hartlib Circle, although this has never been established beyond doubt.

In a perverse way, he would have been more relaxed about submitting alchemical conclusions to the scrutiny of his peers within the secret society than he was about offering his 'scientific' papers to the Royal Society. This is almost certainly because of the covert nature of the process. Newton guarded his privacy jealously and could not stand being challenged over his ideas. Years later he disliked dealing with anyone but Henry Oldenburg (secretary of the Royal Society) in preparation of any of his publications through the Royal Society. Most significantly, as an alchemist, he too could hide behind a pseudonym. Revealingly, his was "Jeova Sanctus Unus" - One Holy God - based upon an anagram of the Latinized version of his name, Isaacus Neuutonus.

So, armed with his knowledge of the mysteries, his early, tentative links with the alchemical underworld established and a study filled with furnaces, laboratory equipment and chemicals, what did Newton actually set out to do? To the modern eye, his earliest experiments seem decidedly prosaic, but he was feeling his way into the subject, following the clearly defined path laid down by his predecessors – in particular Robert Boyle. Yet, from the earliest experiments, Newton's methodical approach distinguished him from almost all of the thousands of alchemists who predated him. From the start he applied his practised methods of note-taking, meticulous attention to detail and a genius for observation. »»

In view of the origins of science and given the hold of the Freemasonic Movement, or what preceded it, on the means and direction of the scientific effort as from the 16th century, we should hardly be surprised by the derailments of the application of modern science, which is too often senseless and unethical and politically motivated, while the establishment entertains the myth that science is 'always' objective and will offer the means to free us from all ills. This has happened to such an extent that this belief in the 'unlimited' potential of science has grown into a religious creed. No wonder "Happy are the people of Bensalem" has never been met.

11.7 – Concluding Remarks

In finding the path that would lead to the modern scientific routine we started at the Classical Greek culture. In the subtitle we called our essay “From Thales to Newton”. The beginnings of true science are commonly associated with Plato, but actually it was Thales of Miletus. He was the first to profess systematic thought without reference to mythology. The ancient Greeks correctly recognized Thales as the first of the Seven Sages. To him they associated the aphorism “gnothi seauton” (γνώθι σεαυτόν): know thyself. Thales traveled the ancient world, learning from the Egyptians, the Chaldeans, and the Babylonians. He then brought his learning back to Greece and expanded upon it. What happened before Thales is shrouded in darkness, and because we cannot write history without ancient script, our essay started with Thales.

What calls for our attention is not so much the development of science in detail, but the analytical and deductive tool of reasoning that lies behind it, and its relation to the religious precepts of man. We shall not tally the discoveries that led to our present-day world. It is not the application of science and its discoveries that concern us here, but the application of thought. Our essay may seem to have come to an abrupt end. It is not. It is the end of the discovery of how to do science. Once humankind had reached that point, the rest followed. To reiterate the quote by Keynes:

«« Newton was not the first of the age of reason, the first and greatest of the modern age of scientists, one who taught us to think on the lines of cold and untinctured reason, as in the eighteenth century he came to be thought of. No, he was the last of the magicians, the last of the Babylonians and Sumerians. (...) Isaac Newton, a posthumous child born with no father on Christmas Day, 1642, was the last wonder-child to whom the Magi could do sincere and appropriate homage. »»

Thus, our exploration of the emergence of the scientific mind terminates with Isaac Newton, the pivotal figure between the old-fashioned ways and modern science. He was not yet a scientist from our modern perspective. At his death in 1727 we may rightly say that the practice of modern science was born! The torch was taken up by the Royal Society. What happened after his death is not of our concern, because that is extrapolation. Science is growing exponentially. If so, the major advancements and upheavals over the past 300 years are only the tip of the iceberg.

In our days the dangers of the scientific mind, as entertained by Newton, are painfully present. Science has become a foolish self-exaltation of Man. Newton too was full of pride. A new paradigm is called for in order to give God his rightful place in our quest for knowledge. Creation and her marvels, in which we live, did not come into existence by mere chance, as if it came from the womb of a mindless universe, but this happened by means of a conscious operation by the almighty power of God, who is perfect in all his ways and keeps the creation going through his almight. We are not here to perfect his works (as if his creation is full of mistakes), but to cooperate in bringing creation to its destination as willed by God. As Fanny Moisseieva wrote:

«« A true scientist is never an atheist, investigating with his genius all the findings, he recognizes the great Creator with all his heart and soul. Hence, God seeing the development and intelligence of these creatures who search for a better knowledge of things and an amelioration of their short existence, will aid their efforts with His grace. But God also wants the perfection of their souls. »»

AD FINEM

Notes

(107) To discover how Freemasonry is still loyal to its Rosicrucian roots, the ANNEX with the bibliography of Arthur Edward Waite, under: "Doctrine and Literature of the Kabbalah".

The plot against Christendom prevails over the objective of the 'One World Order'

(108) A comparison can be drawn with Nazism. As early as 1922 in Munich, Hitler claimed: *"Once I really am in power, my first and foremost task will be the annihilation of the Jews."* The extermination of the Jews appeared to be Hitler's overriding objective to which end no curtailment of resources was permitted. This explains why at the end of the war, desperately needed resources for the war effort were diverted to the continuation of the chasing and bringing together of Jews and their transportation to the extermination camps. Another comparison can be drawn with the Jew haters in today's world, for whom the extermination of the Jews is far more important than the occupation of land in the State of Israel. The unilateral withdrawal from territories under Ariel Sharon and Ehud Olmert to get peace for land is a perverted scheme, because the 'road map' does not exist, neither in the minds of the Arabs, nor in the minds of the decision-makers in Israel and America.

Who was Samuel Hartlib?

(109) H. Samuel Hartlib was an important factor in the Rosicrucian movement. He was born in approx. 1600 in Preussisch Elbing, a Hanseatic town. As shown in the records of the city of Danzig, that at the time kept material about known Jews, Samuel Hartlib (or Hartleb, 'leb' being Hebrew for 'hart' made up of the first and last letter of the Thora). He was of Jewish descent. It is obvious that after he went to England, his Jewishness did not play a part in the plans he developed. He first came to England in the mid-1620s when his initial contacts were with the University of Cambridge. Exiled from Germany, he made his home in England from the 1630s. As it was not until 1656 that Cromwell abolished the Edict of the year 1290 that banned Jews from England, Hartlib could not have been known openly as a Jew. At best we can call him a marginal Jew. On this basis alone, it would be preposterous to call it a Jewish plot.

Who was William Shakespeare?

(110) In view of his antecedents it is wholly unlikely that Will Shaksper of Stratford was the author of the Shakespearian collection. Neither is it likely that Francis Bacon was the author in view of his extensive duties, which robbed him of the time to write all the 39 playwrights and some lyrics. It seems that he wrote the poems "Venus and Adonis" and "The Rape of Lucrece". Nonetheless, it is more than likely that he supervised the writing of the plays within the literary group that was being paid by him, called "The Honourable Order of the Knights of the Helmet". This group is the real author of the Shakespeare project, whose primary goal was to set the English language on a solid footing. The plays also convey the Baconian idea of how to conduct the business of government. "The Knights of the Helmet" was named in honour of the invisible helmet of the goddess Pallas Athena, that as source of inspiration draws humankind out of its ignorance – an activity called the shaking of the spear. The writing was a huge project in concerted action wherein Edward de Vere (†1604), the Earl of Oxford, played a major part. Meanwhile, Will Shaksper of Stratford, cousin of de Vere through the Arden family, took the credit for the plays, so the true authors could remain hidden behind the stagecraft. Gertrude C. Ford makes a convincing argument in her book from 1964 "A rose by Any Name" (Barnes & Co) that indeed de Vere was one of the major contributors for the Shakespearian collection. She thinks, and many with her, that he was 'the' writer, but that goes too far.

Robert Dudley, the Earl of Leicester

(111) Sir Francis Bacon (1561-1626) was the son of Queen Elizabeth I (1533-1603) and her lover Sir Robert Dudley (1532/33-1588). Robert Dudley was the fifth son of John Dudley, Duke of Northumberland, virtual ruler of England during the later part of the reign of Edward VI. Robert Dudley was a principal patron of the arts, literature, and the Elizabethan theatre. With the accession to the throne of Elizabeth in 1558, Dudley's fortunes soared rapidly. She at once made him Master of the Horse, and in April 1559 he became a Privy Councillor and Knight of the Garter.

He soon won the Queen's affection and favour, but his preeminence aroused bitter jealousy at court. When, in 1560, his wife Amy Robsart fell down a flight of stairs and died, false tongues spread the rumour that Dudley had murdered her in order to marry Elizabeth. At the time it was common knowledge that Dudley did become an active suitor of the Queen. [Anyhow, the facial features of Newton, especially his nose, are in close resemblance of both Robert Dudley and the Queen.] Elizabeth proposed that Dudley wed Mary, Queen of Scots, but he was not inclined. Probably to further this design, Elizabeth made him Earl of Leicester and Baron Denbigh in September 1564. As from 1563, Sir Robert Dudley, by royal grants, became one of the greatest landowners in North Wales and the English West Midlands. In 1587, he was appointed Lord Steward of the Royal Household. The Earl of Leicester was one of Elizabeth's leading statesmen, involved in domestic as well as foreign politics alongside William Cecil and Sir Francis Walsingham. After the death of Amy Robsart, Dudley did not remarry for Queen Elizabeth's sake and when, after 18 years, he finally did, his new wife, Lettice Knollys, was permanently banished from court. This and the death of his only legitimate son and heir were heavy blows. Shortly after the child's death in 1584, a virulent libel known as Leicester's Commonwealth was circulated in England. It laid the foundation of a literary and historiographical tradition that often depicted the Earl as the Machiavellian 'master courtier' and as a deplorable figure around Queen Elizabeth. More recent research has led to a reassessment of his place in Elizabethan government and society. (sources: both Wikipedia and the Encyclopedia Britannica, Internet version 2023)



Robert Dudley, the Earl of Leicester



Elizabeth I, when still a Princess

Lady Anne, the foster-mother of Sir Francis Bacon

(112) Anne Bacon (1527/28 -1610) was a highly distinguished lady of the British court. She was one of the five daughters of Anthony Cooke, tutor to Henry VIII's only son Edward. Being an educator, Anthony ensured that all of his sons and daughters received a humanist education, with in-depth studies in languages and the classics. Anne was trained in Latin, Italian, French, Greek, and possibly Hebrew. Her family's social status was high, in part because her father worked so closely with the Tudor royal family, and were large landowners as a result. Anne Cooke married Sir Nicholas Bacon, Queen Elizabeth's Keeper of the Great Seal, in February 1553. They had two adopted sons, Anthony (1558-1601) and Francis (1561-1626). Both foster-brothers collaborated on plays and those kind of things. Anne was passionate about her religion, which can be seen in the letters she wrote to her sons. Due to her education, she wrote many letters to clergy-

men and debated theology with them as well. However, the letters to her sons were more concerned with their well-being in mind, body and spirit. At age twenty-two, she translated and published Bernardino Ochino's work from the Italian. Her translation from the Latin into English of Bishop John Jewel's work, "Apology for the Church of England", was a significant step in the justification of Anglicanism. The work was in support of Queen Elizabeth's religious policies. (source: Wikipedia)

(113) "Francis Bacon's Personal Life-Story: The Age of Elizabeth" by Alfred Dodd - David & Charles Publisher, Exeter, England (two volumes in one) # 1987 (pp. 372-377). This is a brilliant in depth investigation of the life of polymath Francis Bacon. It took the author 30 years to do the research. It gives a truthful account as from childhood until old age, with particular reference to both his public life and his concealed life. Without exaggeration he was the most mysterious figure of the Elizabethan Age. The book completely refutes the various aspersions made against his character. There is also given some account of his labours as an educationist and as an ethical teacher, as well as highlighting him as the Shakespearian poet. Alfred Dodd reveals that Bacon was the head of a team of writers that turned out the Shakespearian plays, while, according to Dodd, he himself wrote all the Sonnets and a good number of plays. EDITORIAL NOTE in 1987: Vol. I was published in 1949 and this coincided with the author suffering a severe stroke. Vol. II was ready for publication but, despite the ready help of many loyal friends, it was not possible to achieve publication. For many years the manuscript was 'lost', but in the eighties was revealed for publication. It has been agreed that both volumes should be published in one volume, which was indeed the author's original intention.

Did Francis Bacon die in 1626?

(114) As we learn from the preface of Henry Pott's book, "each one of four different writers, who were his contemporaries and moved in the same learned circle, when reporting on Lord Bacon's death, assigns a different place for the event [no doubt on instruction by the master himself]. One says that he died at the house of Lord Arundel at Highgate. Another that he died at the house of his friend, Dr. Parry, in London. The third that he died at the house of his cousin, Sir Julius Caesar, at Muswell Hill, and the fourth that he died at the house of his physician, Dr. Witherbourne. Not one of these 'authorities' either refutes or confirms another. No records exist of who witnessed his death, or who attended his funeral, and it remains unknown where and how he was buried." As concerns the place of burial, it is well attested that Bacon was buried in St. Michael's Church in St Albans, Hertfordshire, where he still lies. We should not dismiss the story that he still lived after 1626 out of hand, because he might have suffered that year an apoplectic stroke (as a stroke was called in those days) and to live partly paralysed for a few more years. By staging his death in typical Baconian style, he could say farewell to this world in an honourable fashion and keep the legend alive.

From the introduction to Sylva Sylvarum (that also includes New Atlantis)

(115) Dr. Rawley, 'his lordship's first and last chaplain', as he always proudly entitled himself, published the Sylva Sylvarum in 1627 with an address to the reader about the nature of science, which, he explains, is to Bacon not only methodical but relates also to an intuitive quality. The latter explains, says Rawley, why the book is written in aphorisms: "*Lord Bacon knew well, that there was no other way open to unloose men's minds, being bound, and, as it were, maleficate, by the charms of deceiving notions and theories, and thereby made impotent for generation of works.*"

(116) The silva is a 'collection genre', a miscellaneous poetic form of classical origin, which enjoyed a great vogue in the Renaissance and early 18th century. The best-known practitioner of the form in ancient times was the Roman poet Silius, who produced a collection of 32 occasional poems entitled Silvae. The Latin word silva literally means 'wood' or 'forest', but its use as a literary term plays on several metaphorical meanings the word acquired over time, especially 'pieces of raw material' and 'material for construction'. (From "New Literary History" by Frans de Bruyn - John Hopkins University Press # 2001 (p. 347).

The Royal Society and Freemasonry

(117) Francis Bacon's idea of "A Solomon's House of Science for the collection of natural facts" first led to the establishment of the Gresham College or Academy and very soon afterwards to the official charter of the Royal Society. The men who directly founded the Royal Society were also highly involved in Rosicrucianism. Indeed, The New Atlantis was afterwards published as "The Land of the Rosicrucians". The connection between the mother of the Freemasonic movement and the establishment of the Royal Society is highly significant.

Redemption no longer expected from faith, but from science

(118) Encyclical "Spe Salvi" - in hope we are saved, by Pope Benedict XVI # 2007 (§ 16-17): "How could the idea have developed that Jesus's message is narrowly individualistic and aimed only at each person singly? How did we arrive at this interpretation of the "salvation of the soul" as a flight from responsibility for the whole, and how did we come to conceive the Christian project as a selfish search for salvation which rejects the idea of serving others? To find an answer we must take a look at the foundations of the modern age. These appear with particular clarity in the thought of **Francis Bacon**. That a new era emerged – through the discovery of the Americas and the new technical achievements that had made this development possible – is undeniable. But what is the basis of this new era? It is the new correlation of experiment and method that enables man to arrive at an interpretation of nature in conformity with its laws and thus finally to achieve "the triumph of art over nature" (victoria cursus artis super naturam). The novelty - according to Bacon's vision - lies in a new correlation between science and praxis. This is also given a theological application: the new correlation between science and praxis would mean that the dominion over creation – given to man by God and lost through original sin – would be reestablished. Anyone who reads and reflects on these statements attentively, will recognize that a disturbing step was taken: up to that time, the recovery of what man had lost through the expulsion from Paradise was expected from faith in Jesus Christ: herein lay 'redemption'. **Now, this redemption, the restoration of the lost 'Paradise' is no longer expected from faith, but from the newly discovered link between science and praxis. It is not that faith is simply denied; rather it is brought to another level – that of purely private and other-worldly affairs – and at the same time it becomes somehow irrelevant to the world.** This programmatic vision has determined the trajectory of modern times and it also shapes the present-day crisis of faith which is essentially a crisis of Christian hope. Thus hope too, in Bacon, acquires a new form. Now it is called: 'faith in progress'. For Bacon, it is clear that the recent spate of discoveries and inventions is just the beginning; through the interplay of science and praxis, stunning new discoveries will follow, a totally new world will emerge, the kingdom of Man. He even put forward a vision of foreseeable inventions – including the aeroplane and the submarine. As the ideology of progress developed further, joy at visible advances in human potential remained a continuing confirmation of faith in progress as such."

(119) Shakespeare: **Timon of Athens**, Alcibiades in act 4 scene 3, and **Macbeth** in act 1 scene 3, who answers the witches.

(120) "Isaac Newton: The Last Sorcerer" by Michael White - Fourth Estate # 1997 (p. 138).

(121) Ibid (p. 138).



‘The New Atlantis’ or the manipulation of science

An excellent article on an interpretation of The New Atlantis, appeared on a website from Kenyon College (Ohio, U.S.A.) by Sarah Stella, Caitlin Horrocks, Sarah Schaff and Jess Spalter, here given with some amendments by the present author. More information on Francis Bacon and his tale is to be found in the last article on the Ascent of Man & Science.

Francis Bacon wrote ‘The New Atlantis’ in 1624 and it was published after his death in 1627. Unlike some of Bacon’s other works, he intended the tale for a widespread, english-speaking audience. To this effect it was first written in English and then only Bacon translated it into Latin (Berneri 129). In The New Atlantis, Francis Bacon continues the utopian tradition in the same vein as Thomas More. In fact, *“there was a paucity of utopian literature for nearly a century following the appearance of More’s Utopia”* (Hertzler 146), which The New Atlantis helped to dissipate. However, in many ways, Bacon’s utopia is highly dissimilar to More’s. Bacon was the first philosopher to suggest the improvement of society through the scientific pursuit. *“In previous utopias, this renovation was to be achieved through social legislation, religious reforms or the spreading of knowledge”* (Berneri 127). The work is Bacon’s *“dream of compensation”*, a joining of science and power (Berneri 128). Thus Bacon views the secrets hidden in nature as a means that government can employ for the betterment of man. The illusion, present in the work, arises out of getting to know those secrets, which is science, for the betterment of society.

Bacon’s view of the essential desires of human beings is highly Machiavellian. In the tale he implies that human greed, which stems from bodily desires, is not something against which to fight. In Bensalem the House of Solomon finds ways to appease wants through material means, made possible by extraordinary scientific advances. Bacon sees no need for humans to aspire toward fewer desires as Plato, Aristotle and the other ancients do. Coaxing humans into a higher moral state seems like an utter waste of energy. To this end Bacon presents an illusion of the good society. The beautiful and happy Bensalem has a notably ugly side. *“Some things I may tell you, which I think you will not be unwilling to hear.”* The governor of the house of strangers, a priest by calling, just has spoken this before telling the story of the Bensalemites’ conversion to Christianity. Through this speech, Bacon strongly suggests that the Christian conversion of the Bensalemites was a plot orchestrated by the House of Solomon. This raises an interesting question: what would Bensalem want with Christianity? Traditionally, Christianity represents ideals which are the antithesis of those which the Bensalemites embrace. It prods people to try to achieve a more divine level of morality. Yet, in a decidedly anti-Christian way the Father of Solomon’s House seems to say that the eventual goal of the country’s scientists is to achieve, by their accomplishments, the power of a divinity, termed elsewhere the kingdom of heaven. Says the Father of Solomon’s House: *“The end of our foundation is the knowledge of causes, and secret motions of things; and the enlarging of the bounds of human empire, to the effecting of all things possible.”*

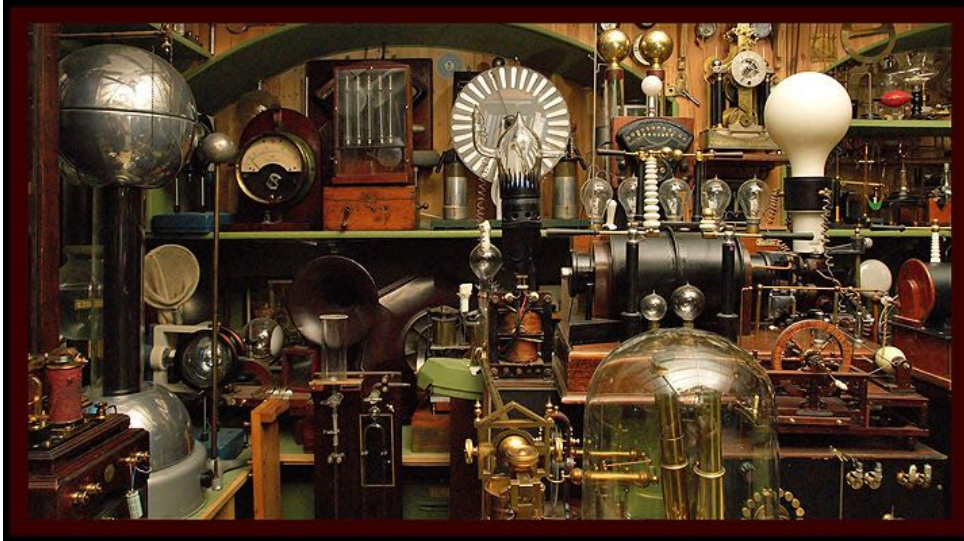
Problematic as well is the seeming ignorance of the sailors and citizens to the undercurrents of dishonesty which pervade Bensalem. *“We [the sailors] held it so agreeable and pleasing to us, as we forgot both dangers past and fears to come.”* They do not appear to notice that periodically,

the people who come to educate them about various aspects of Bensalem disappear mysteriously. First it is the governor, who apologizes for leaving abruptly and then it is Joabin who is ***“commanded away in haste”*** by a messenger in rich attire. Most likely, the answer to both questions is tied up in the House of Solomon and the illusion it perpetuates concerning the ‘good’ government of Bensalem. The ever-present goal of the House of Solomon is to keep order and harmony at all costs, for in persiflage to psalm 33 it is stated: ***“happy are the people of Bensalem”***. The people ‘are’ happy because all their needs are met. Perhaps Solomon’s House introduced Christianity to satisfy yet another desire. Christianity helps the Bensalemites feel morally correct, even as the science which allows them to feel content in every other way engages in a game of deception, illusion and worse. Members of the House of Solomon ***“take all an oath of secrecy for the concealing of those which we think fit to keep secret; though some of those we do reveal sometimes to the State, and some not.”*** This makes both the citizens’ and the sailors’ blindness a willing one. To probe too deeply into the morality of Solomon’s House would mean to dispel the illusion and lose many of the advantages they are fond to enjoy.

While there are decided problems with the society Bacon presents, simultaneously The New Atlantis evokes a deep admiration for the intelligence and profound ingenuity of the men who produced such an abundance of scientific wonders as to alleviate want. In this way, he taps into the utopian tradition which was begun by the likes of Plato. In “A Modern Utopia” (1905), H.G. Wells calls The New Atlantis story the first of the modern utopias and “the greatest of the scientific utopias”. Indeed, the tale does look to the future of humankind while also keeping a watchful eye on the past. This is where the unusual title comes into play. Bensalem seemingly has none but the most trivial connection to the Atlantis of antiquity. The title serves to call the reader’s attention to Plato’s account of Atlantis in the *Timæus* and *Critias* (Weinberger xiii), and of course to Plato himself. Additionally, Bacon’s tale is ostensibly incomplete just as the *Critias* ends. Apparently missing from both Bacon’s and Plato’s dialogues is a speech about excess and moderation. Both works are seemingly lacking the kind of knowledge about the uses and abuses of power, which Zeuss may have been about to impart before the *Critias* ends (Weinberger xv). Yet this lesson is implicit in The New Atlantis. In the sinister undertones of Bacon’s work, it intimates a message about scientific power to satisfy man’s wants. Bacon implies that a less-than-honest government, to put it mildly, is the price which men must pay to reach the ultimate satisfaction of their desires. In this vein too, says Hubert Luns, the remark should be understood, which scandalously has been put into practice in today’s world: ***“We have consultations, which of the inventions and experiences we have discovered shall be published, and which not; and take all an oath of secrecy for the concealing of those which we think fit to keep secret; though some of those we do reveal sometime to the State, and some not.”***

Though the tale’s connection with Atlantis is still tenuous, Bacon’s account did help to encourage people’s fascination with the lost city of Atlantis (Forsyth 2) and established some traits which show up in later accounts of that mysterious place. In a broader sense, the tale taps into the human need for a perfect society. The awe and admiration which Bacon’s society inspires in the reader are in many ways his final illusion, by which he wishes to motivate his readers to seek science. Though the island of Bensalem does not exist except within the pages of his narrative, Bacon viewed it as a pure necessity for which humanity should earnestly strive. The technology of science provides The New Atlantis with a power unrealized by Plato. ***“Because technology is progressive, getting to the utopia has tended increasingly to be a journey in time rather than space”*** (Manuel 28). Bacon’s contribution to the Atlantean tradition is the sense that, in time, the perfect society is achievable, merely by the application of science. Atlantis is at once paradise lost and the paradise which man can regain, though not through Christ’s redemption, but solely on his own initiative and by his own intellect.

The Breach between Religion and Science in the Early Modern Time



In our times we perceive a vast chasm between scientific and religious thought, as if it was a question of two irreconcilable concepts. The gap has to be closed again. How this can be done becomes clear when we look at the initial phase of scientific practice. The Protestant way of thinking played a not inconsiderable role here.

1 – The difference between theology and philosophy

What calls for our attention is not so much the details of the development of science, but the analytical and deductive tool of reasoning that lies behind it, and its relation to the religious precepts of man. We shall not count up the discoveries that have led to our present-day world. It is not the application of science that concerns us, but the application of thought. We owe modern scientific practice to philosophy and to its corollary, mathematics. Indeed, mathematics is a form of philosophy. This couple passed through all the important 'houses' while chasing religion from its abodes, leaving incredible devastation in their path. Some of the houses that come to mind are medical practice, law and order, politics and warfare, socio-economic government, administration and business. Finally, in the second half of the 20th century, the house of Christian Faith was visited. Religion was ousted and replaced by Modernistic concepts. Religion is not exempt from philosophy. We call it theology, but theology is disciplined by faith, whereas philosophy is not. Most importantly, theology derives its pattern of thought from the supernatural, sometimes called the fifth dimension in Jewish mysticism, whereas the natural world knows only four dimensions. Significantly, the Torah is comprised of five books.

There are four spatial dimensions: one invisible, the *materia prima*, and three perceptible dimensions (time is regarded as a dimension, but that is a misconception). The fifth dimension, therefore, lies beyond our powers of comprehension, unless God reveals it to us. It is therefore that the apostle Peter writes: *“No prophecy of Scripture is of any private interpretation (omnis prophetia Scripturae propria interpretatione non fit).”* (2 Petr.1:20) An interesting fact in this relation is that the name *Juda* is written with the ‘tetragram’ – a technical term for the Name of God, consisting of four letters: “**Jahweh**”. When an extra letter is added to the Name, there are five letters (yod, he, vav, dalet, he), which can be read as *Jehuda* or *Juda*. The patriarch *Juda*, ancestor of *Jesus*, thus represents the door (dalet) through which the divine, He Who lives in the supernatural fifth dimension, came into our world. This truly happened in *Jesus Christ*, in Whom the natural and the supernatural are One.

Saint Anselm would feel at ease with this line of thought. In his “Proslogion”, a discourse on the existence of God written in 1077-78, he shows how, in the quest for the ever-greater God, both the mystical and the theological fuse. In the quest for that supreme ‘*esse*’ He reveals Himself through His Word, addressed to humans (very important: we are part of the equation), as being the Life that transcends life (*Vita summa vita*). By the force of his intellect and through his words Anselm notices that he discovers God only partially - but it is nevertheless a discovery - and that he needs the heart to discover God in His indivisibility... and even then! The burning desire to get to know God, the Word above each word, is always insufficiently satisfied. One century after the Proslogion was written, William of Auxerre (ca. 1150-1231) meagrely defines theology as a science. In his view, its first principles, the articles of faith, are axiomatic; known immediately as such and they can be used as premises in demonstrative syllogisms (a form of reasoning) that yield scientifically valid conclusions. Although this statement has some merit, its oversimplification makes it false. Thus formulated, it blurs the distinction between theology and philosophy.

Philosophy should serve as the maidservant of theology

Religion, according to Bilderdijk, involves the recognition of God through the heart. Afterwards follow the contributions of the mind and the senses. Philosophy, which acquires systematic knowledge through the reasoning of the mind, should be subservient. If the mind functions autonomously – which for Bilderdijk usually means: separated from the heart – the ranking order of the sciences also wavers. In an essay on the human mind, Bilderdijk criticizes the emancipation of philosophy because it obscures our view of divine wisdom. (“Discourses on soul, moral and legal doctrine” – Leiden # 1821, p. 158) Philosophy should serve as the maidservant of theology, but since the Enlightenment has rivaled her mistress, and she thinks that the time has now come for reason to call the shots. Then the heart just has to bow deeply.

“De Missie van een Genie – De spirituele wereld van orangist Willem Bilderdijk”
by Bert Engelfriet # 2010 (p. 137).

2 – The Limits of Science

René Descartes (†1650) formulated the main thrust of the analytical-deductive method. Its extreme application leads to ‘scientific materialism’, an approach that denies the reality of anything that cannot be verified by direct observation. This distinguishes itself from pure science, which does not close itself off from the spiritual essence that underlies the reality knowable by the scientific method. Famous paleontologist George Gaylord Simpson, in his book “The Meaning of Evolution”, states that “*Man is the result of a purposeless and natural process that did not have him in mind (beforehand); he was not planned*”.⁽¹²²⁾ This is the only logical conclusion of scientific materialism.

Of his discovered method Descartes says: “*I shall bring to light the true riches of our souls, opening up to each of us the means whereby we can find within ourselves all the knowledge we may need for the conduct of life and the means of using it in order to acquire all the knowledge that the human mind is capable of possessing*.”⁽¹²³⁾ This seems a strange remark for someone who discovered the cool analytical approach. We should be aware, however, that knowledge in Descartes’ day was a bizarre mixture of fact and imagination, of myth and the occult, of religious dogma and wild conjecture and he too had some bizarre ideas, but that is of no importance. What matters is that he gave us the rules for the scientific logic, which is still bon ton. These are described in his introduction to his “Essays” published in 1637. The title of the introduction was “Discourse on the method of rightly conducting one’s reason and seeking the truth in the sciences”. His method – he himself states – started with a sudden revelation on November 10th 1619, while staying in a German village near Ulm. Revelation or not, it proved a momentous occasion for the advancement of science. He mentions four stages, which he says are based on the premise that all human knowledge of things can be derived from the geometrical method. The four stages are described as follows:

- 1) **Evidence:** accept for fact-gathering as true only that which gives a clear idea to the mind (clare et distincte percipere);
- 2) **Division:** split problems into smaller units, as many as possible;
- 3) **Increasing complexity:** approach problems by going from the most simple to the most complex;
- 4) **Exhaustiveness:** check everything carefully and leave nothing out.

The scheme explains why the science of mathematics is such a powerful manipulative tool and why it allows the scrutiny of any object under consideration. By crudely reducing complex realities to simple geometrical concepts, Descartes invented the scientific method. Though this may seem to be an objective approach, it is not, since ‘evidence’ covers only that which can be expressed in observation ‘points’; in fact, a geometrical figure consists of points. So too there are discussion ‘points’. Indeed, the simplest element in a figure is a point, the ultimate simplification. The points gain their function from the structure to which they belong. A group of objects, designed like points on a scale (a gauge or benchmark), consists of dispensable and interchangeable units. Thus everything and everyone is reduced to ideal bodies or concepts where reference points indicate the action to be undertaken.

The process of reduction has been applied to all fields of human endeavour. People too are reduced and made into objects, non-persons, like points on a scale. Ancient Greece already had philosophy that applied to it. The ideal society for Plato consisted of 5,040 subjects because they can be divided by all numbers up to 12 except for 11. This allows for the maximum of statistical differentiation. Imagine how fabulous it must be to be king of that society and to dictate its rules with mathematical precision! But beware: whoever does not fit within the ideal mould shall be brutally ‘reduced’ to become a point, to become an object. God created man ‘equal’, that is to say, with due respect to the unique qualities of each. As the Mishna Sanhedrin 4:5 observes correctly:

«« Adam, was created for the sake of peace among men, so that no one should say to his fellow: My father was greater than yours (...) Also, man was created singly to mirror the greatness of the Holy One, Blessed be He, for if a man strikes many coins from one mould, they all resemble one another, but the King of Kings, the Holy One, Blessed be He, made each man in Adam’s image, and yet not one of them resembles his fellow man. »»

And thus each individual has his or her own and invaluable service to the whole of many-faceted society, but the mathematical approach is precisely the negation of this. From that point of view a group of objects (points on a scale) consists of dispensable and interchangeable units.

Following the Cartesian system of classification all events are described by numbers. Essentially, numbers describe equality or distinction: in a comparison something can be the same or different with regard to an aspect under consideration. All aspects and things can be defined by the yes or no, A or non-A, a one or zero, the “est et non” of Pythagoras. This very principle also determines computer language and its quasi-unlimited powers of description. It is not difficult to understand why the Cartesian system becomes a dangerous tool if pushed to its extreme and applied to the social fabric of society. While it is unnecessary to insist on the efficiency of the geometrical spirit, if it is accompanied by restrictive qualities, we should clearly condemn its unrestrained use.

3 – The Ideal versus Reality

The important restriction of ‘A or not-A’ or ‘est et non’ is that true reality cannot be delineated as such, it is not neatly demarcated. What we see is a perceived reality. According to the Heisenberg principle, true reality is often indeterminate and vague, as Plato was shocked to discover when he found the incommensurable or irrational numbers in the square root of 2, which is the length of the diagonal within a square with standard side 1, immeasurable because $\sqrt{2} = 1.41421356237...$ etc. As it turned out, the neatly defined world of geometry could lead to an immeasurability, a monstrosity that was regarded as an attack on reality because not everything could simply be counted with pebbles. This was solved by Plato’s tour the force via the paradox of ‘ideal’ and ‘geometry’, each possessing the primacy as may seem fit.⁽¹²⁴⁾ The ‘idea’ serves to articulate the principle and ‘geometry’ to implement the principle, however flawed it may be. But the inherent flaws of this system when applied to matters of government are generally overlooked. Keep in mind that in Ancient Greek mathematics was a kind of philosophy and not a science, as was pioneered by Isaac Newton.

If one compares two great works of Plato: “The Laws” and “The Republic” (politeia) this is brought to the limelight. In The Laws Plato transposed this idea of the perfect world of forms to the world of political ideas. In The Republic, which should be read together with the other book, he shows that a discrepancy exists between the ideal world of political ideas (like the Universal Declaration of Human Rights) and the practice of law and law enforcement, which however can be abridged by means of the ‘noble lie’ that the French call ‘raison d’Etat’ (motive of the State). This is permissible because the ‘real’ world in the Platonic system is the world of ideals and the world in which we live is ersatz, which of course is an inversion of values. The discrepancy between the language of both books is so great that the reader has difficulty to accept that they have both been written by the same author. But that is on purpose. The ‘laws’ express the ideal and it is the ‘republic’ that executes them ruthlessly and meticulously. It is an inhuman system because the theory and its application are two worlds apart – it is the letter that kills. H. Lamer provides us with the following clarification in his “Eycyclopedic Dictionary of Antiquity”: ⁽¹²⁵⁾

«« To Plato the concept of ideas meant the eternal, unchanging, original forms of all things in the world surrounding us that we perceive with the senses, the ‘appearance world’ of the creatures, the objects, but also the abstract concepts such as virtue and good. Plato states that the ideas really exist in an eternal, unchanging world. The world as we perceive it came into existence from that world of ideas by imitation. And since the world we perceive is made of imperfect material, it is an imperfect and less valuable world of appearances when compared to the perfect world. »»»

The ever greater complexity

Science as a whole is a far more complex enterprise than consideration of the individual parts would indicate. These parts are complex in themselves, but when taken together, the whole is of substantially greater compexity. (...) I think it is clear that we don’t live in Popper’s world [or for that matter in the Cartesian world] that would consist of situations where we can give a thouroughly rational account of ‘all’ our moves where situations can be identified in a relatively simple manner, where there are no disturbances of our experiments and our observations, where facts are never mixed up with each other and where there are no ‘hidden facts’. [Such a world is totally imaginary.] (...) While there is a broad recognition of the complexity inherent in some scientific activities, especially those considered higher-level inferential tasks, it is often not recognized that complexity [and the subjective evaluation that goes with it] characterizes virtually all activities, even those considered lower-level inferential tasks.

From: “The Limits of Scientific Reasoning” by David Faust
University of Minnesota Press, USA # 1984 (pp. 2-21)

His pupil, Aristotle, representing the intuitive-literary tradition, set himself up against Plato and further developed his theories, the theories of the man who represents the cool-analytical tradition. Aristotle opposes Plato’s doctrine of the ideas and states that the ideas have no independent existence, but can only co-exist with the individual. Plato’s aversion to vagueness, seen as a contemptible degradation of the ideal, is clearly illustrated in his views on astronomy:

«« The stars, however beautiful, are merely part of the visible world of ideas; the endeavor to determine exactly the motions of these imperfect [or degraded] bodies is therefore absurd. Instead, let us concentrate on [abstract] propositions in astronomy as in geometry and dismiss the [real motions of] heavenly bodies, if we intend truly to apprehend astronomy. »» (126)

Plato's principles were elaborated by Immanuel Kant in his "Critique of Pure Reason" from 1781. Kant said that the Platonic *ἰδέα* is a concept that has its origin not in the senses but in Reason, and whose object is not to be found in the empirical world, as is the case with Aristotlian concepts of understanding. Our sense organs, Kant explained, are like messengers; if we really want direct knowledge of the world, we would need to bypass our sense organs, which, he said, is clearly impossible. Just like Plato, Kant proposed that the world we conceive in our mind is artificial, conditioned.

The correct approach follows just the opposite way. "*God hangs the Universe on the intangible.*" says Job. (26:7) And because God, who is spirit, made us in his own Image (Gen. 1:26), we have the talent to acquire knowledge of 'Reality' by means of our thoughts. Therefore, we as humans are capable to penetrate reality by our thoughts, though not without the discipline of observation. In his "Prolegomena to Any Future Metaphysics", finished two years later, Kant denies this way: "*Things as objects of our senses, existing outside us, are given, but we know nothing of what they may be in themselves, knowing only their appearances, that is, representations which they cause in us by affecting our senses.*" This means a breach with the Enlightenment thinking that departs from the premise, as did Descartes and Newton, that the world is knowable, provided we use the proper means.

4 – How the four Cartesian Stages are being implemented

The first stage, that of fact-gathering, implies that only that which is measurable and evident to the eye is worth noticing. What falls outside this field of view does not exist! To deny the soul in this system is easy. It is sufficient to 'observe' that it is not observable. My dictionary says that observable means 'apprehensible as real or existent'. How convenient! The Cartesian mind leaves no room for any claims to knowledge of how the world might really be as opposed to the deductive claims derived from the mathematical model.

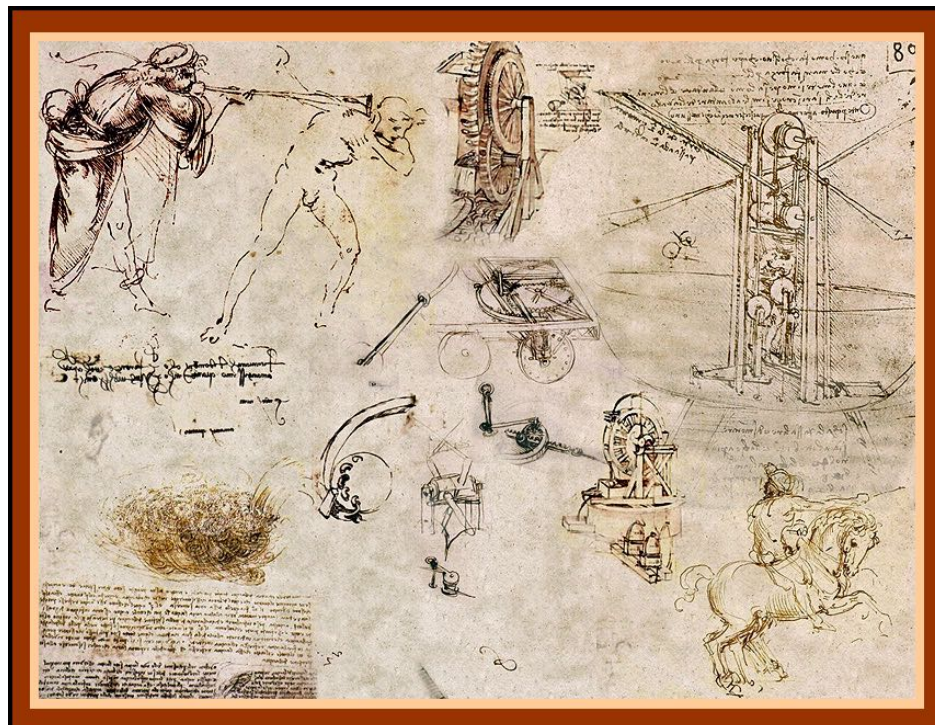
The second stage of splitting a problem into smaller ones has shown its worth, but here too some drawbacks appear. In its practical application there is a need to 'reduce' the infinite diversity of the real world to a manageable amount of qualities, which then becomes a crude but very useful approximation of reality. Incidentally, the system does not show us how to take account of the composite whole. Yet it does show how to split up a problem. In fact, it creates a kind of myopia, because in this system only the little details are reckoned for.

We now come to the third stage of the Cartesian method, characterised by an expanding complexity as a consequence of ever more formulations of minute problems, each one providing its own and partial solution. In the Cartesian method the whole is seen as an assembly of parts, like a car built on an assembly line. The Cartesian formula reads: "The universe is a machine where nothing else needs to be taken into account other than conceptual figures and the movement of its parts." Nothing

remains except sizes, figures and parts. And this gave Descartes the idea of the animal-machine. Then, of course, man is also a machine and thus it becomes extremely difficult to point out the difference between a computational machine and the brain. The processing speed and language level of a computer is expected to surpass the capacity of the human brain within fifteen years! We only need to infuse some kind of self-conscious, and there we are (they will say): a machine with a soul, ...and questions will arise about the ethics of euthanasia. Are we allowed to cut off its electricity supply?

The increasing complexity of the analytical-deductive method of René Descartes is an unstoppable autonomous development. On its way, the whole, as object of consideration, disappears beyond the horizon. The specialisations that follow in the wake of a greater complexity take on their own life without any clear relation to the unified whole, until finally a point is reached that they compete each other. The increased complexity as a function of the deductive method leads to a lack of understanding of the general terms as well as to a growing number of specialisations. The sum is more than the addition of its parts, known as the 'emergent property', but the deductive thinking couldn't care less.

The trend to an excessive specialisation in our modernity is a phenomenon that often leads to problems of manageability, as can be observed in for instance the medical sector. Inductive thinking tries to determine general leading principles on the basis of the details and it seeks to formulate new paradigms, while pure deductive thinking remains far from it. The use of the inductive approach circumvents the problem of manageability for it always improves it; with each novel inductive insight a new cycle is born that pushes back the frontiers to which the deductive process constrained itself. The turning wheel thus created goes from deductive to inductive reasoning and again to deductive reasoning, and so on.



With today's university education, where students are taught ingenious tricks, the critical thinking inherent in inductive thinking is not encouraged, is even punished when reputations are at stake, with a potential of damaging financial interests. Cross-border thinking often means breaking down the old in order to move into a higher gear.

We now come to the fourth stage. Enumerate everything without exception. Certainly no exceptions are allowed 'within' the system that reduces everything to the universal geometry of Descartes. The point is, that the points or units have to fit the design. Any point that is not designated or entitled, is left out of the plan, does not exist. Actually, we are dealing with an 'illusion' caused by a deliberate narrowing of the mind. But everything is taken into account within the narrow perspective.

When, a few years ago, the European Commission was confronted with the question of whether to place an import ban on genetically modified soy from the US, for which they finally granted an import licence, a spokesman said in defence of the dubious decision: *"Because no scientific evidence exists of possible harmful effects, the European Commission cannot put forward an argument to impose a ban."* He could not say: "European laboratories of the highest standard have researched the issue 'exhaustively' and in consequence have reached the conclusion that it is not detrimental to our health." He did not formulate it that way because then the weakness of the reasoning would become obvious. No method is really exhaustive, certainly not with such a complicated matter as genetics. He therefore reverted to an administrative rule that excludes arbitrariness, a rule cast in the same Cartesian mould that at one time was adopted within the house of government. **As long as one remains within the enclosure of the Cartesian logic, the arguments are characterised by a full and precise expression.** The mental design is an invincible fortress because it cannot be attacked from within, as totalitarian regimes were happy to recognize. We have seen the non-too-happy results...

5 – The Quantum Mechanical Thinking

The atomic age in scientific research started in 1887 with Joseph Thomson's cathode ray tube with electrodes at either end of the tube, which gave us the discovery of the electron. With this machine Thomson produced faint trails of illuminated, ionized gas, in an imperfect vacuum, which he bent in a magnetic field. With his bending experiments he showed that the mass of the particles was thousands of times smaller than expected, and he rightfully concluded that these were subatomic particles, soon to be called electrons. The next important step occurred in 1911, when Geiger, Rutherford and Marsden fired particles through an ultra-thin foil of gold, which to their surprise deflected at high angles, providing proof that there was a heavy concentrated mass in the atom: the nucleus. We had now a clear picture of a nucleus with electrons circling around, but according to the laws of electromagnetism, a negatively charged particle undergoing acceleration should be shedding energy and fall in a fraction of a second into the nucleus. But that did not happen – fortunately, and this presented scientifically a huge problem. Departing from the 1912 paper by Charles Darwin (grandson of famous Darwin) on the role of electrons, and inspired by the findings of Max Planck, Niels Bohr, not able to come up with a solution to explain the stability of the atom, made the claim that there exists a ground state orbit in the Hydrogen atom with higher orbits

at fixed intervals from which an excited electron radiates energy, and thus falls back to the ground state quickly. The ground state was not an explanation but a claim.⁽¹²⁷⁾ Those energy differentials between the orbits were called quanta, but it wasn't until his 1921 paper that he showed that the chemical properties of subsequent elements were largely determined by the number of electrons in the outer orbits of its atoms. This became a basis for what is now known as the old quantum theory.

In 1920 Wolfgang Pauli stated at a gathering of the 86th Assembly of the Association of German Scientists and Physicians in Bad Nauheim: *"None of the erstwhile theories, not even the theory of Einstein, has up to now succeeded in solving the problem of the elementary electric quanta in a satisfactory manner; thus it is desirable to look for a deeper reason for this failure."* Pauli and others were questioning the validity of the conventional scientific approach and recognized that the axiomatic ground state of the atom offered an unsatisfactory solution, to which Bohr wholeheartedly agreed. Bohr's model, in addition, had the problem that the frequency of light emitted when an electron dropped to a lower-energy orbit did not properly correspond to the calculated harmonic values. Something drastic was required. A solution emerged thanks to Heisenberg who published a groundbreaking article in 1925. In subsequent papers together with Max Born and Pascual Jordan, during that same year, his matrix formulation of Quantum Mechanics was substantially elaborated. Heisenberg was awarded the 1932 Nobel Prize in Physics *"for the creation of Quantum Mechanics"*.

What exactly is quantum mechanics? Actually, it's a of fuzzy term and represents a drastic departure of Classical Physics. The relations, read mathematics, determine the essence, and the reality behind it is considered secondary. It is a syntactic game. Syntax denotes word choice, matching number and tense, and placing words and phrases in the right order, in this case by looking at the values obtained by experiments. Classical Physics is semantic because it is 'also' much interested in the meaning of the terms; it is driven by the fact that theoretical terms are a reflection of reality and as such have predictive value for findings not yet made. In many cases this allows to account for new phenomena, much more so than with Quantum Mechanics. It enables to build a model that merges a vast amount of knowledge in a certain field. However, Quantum Mechanics gives a plethora of theories that more often than not apply only to very narrow fields, and remain applicable until a new mathematical formula sees the day. Quantum mechanics has caused a two-pronged approach, one for our macroscopic environment and another for the atomic scale which is totally dissociated, as if the one does not follow from the other.

Brett Holverstott in his book on the life and work of Randell Mills (p. 42):

«« Physicists were dropping the physics out of their math, and the idea was embraced even by those who had built classical electron theory; Bohr himself was a quick and lasting convert. Why was this idea so persuasive? Physicists had hit a dead end with the theory, but were able to continue working even without a clear theoretical foundation. New data such as spectral lines for atoms could usually be understood with simple formulas derived from experiments, not from theory. By 1925 [year of the birth of Quantum Mechanics], there was a wealth of this data. If a computational scheme could suffice, why postulate a physical mechanism? »»

How was it that this change was so swiftly adopted? That would not have been possible without the Austrian physicist and philosopher Ernst Mach. He did important physical research, but here his philosophies are of interest to us. For his critical comments on Newton's theories of space and time, he foreshadowed Einstein's theory of relativity, but Einstein later distanced himself from his philosophical ideas. Mach was an avowed Atheist and Marxist. His philosophies are found most importantly in "The Science of Mechanics – A critical and historical exposition of its principles" from 1893, of which Einstein was fond of, initially, and also "The Analysis of Sensations" from 1897.

Young Ernst Mach, only fifteen years old, found in his father's library Kant's Prolegomena, already discussed, seventy years after it was written. In his autobiographical sketch, he tells: *"It made a powerful and ineffaceable impression upon me, the like of which I never afterwards experienced in any of my philosophical readings."* Neo-Kantianism had become part of current scientific thought in Germany and thus Mach's neo-Kantianism found fertile ground in Göttingen, Berlin, and the Kaiser Wilhelm Institutes, where the new physics would be ushered in. In "The Science of Mechanics" Mach postulates:

«« In speaking of cause and effect we arbitrarily give attention to those elements required for the reproduction of facets that are important to us. There is no cause nor effect in nature; nature has only an individual existence; nature simply 'is'. (...) Much of the authoritative value of certain ideas of cause and effect comes from the fact that they were 'instinctively' formed and without conscious effort, and that we are distinctly aware that personally we have contributed nothing to their creation. »» (p. 483)

This means that the causality had be discovered solely by the mathematical method. That now was considered the highest wisdom. Other leading philosophers followed the same track, like Bertrand Russel, who wrote in 1907 in "Discovering Mathematics": *"We tend to believe the premises because we can see that their consequences are true, instead of believing the consequences because we know the premises to be true [the theoretical assumptions]."* And in 1927 in "An Outline of Philosophy" (Ch. 15): *"Physics is mathematical not because we know so much about the physical world, but because we know so little: it is only its mathematical properties that we can discover."*

Soon after reading the Prolegomena, Mach decided that the role of 'the thing-in-itself' in Kant's philosophy was redundant. Kant, so he said, may have believed that the substance (or substratum) of the world is inaccessible, but he still believed it is there. It was for him a kind of universal common denominator of changes in shape, color, and composition. Mach interpreted atoms as a mathematical 'model' for facilitating the mental reproduction of facts, and only a sequel to constructing what he called 'direct descriptions' of phenomena so that we can leave aside the unobservables, leaving just the mathematical equations and relations, which provides the objective discipline to explain and predict. This seems a very efficient way of thinking, but in practice, after almost a century of quantum mechanics, despite occasional successes, it has proven to be a dead end for reasons quite obvious: for how to discover the (intangible) reality if reality itself is deemed fundamentally inaccessible?

From the foregoing, and for people conversant in quantum mechanics, the statement that quantum mechanics finds itself at a dead end, is unconvincing to say the least. To make a good case I would need to go too far into details. Fortunately we have the book from 2016 by Brett Holverstott: “Randell Mills and the Search for Hydrino Energy”. On the back cover is written “*An engaging and fascinating look at both the history of science as well as what’s happening today.*” There is also the comment by Kert Davies of the Climate Investigations Center, with which I fully agree:

«« A monumental effort... at once a science history treatise and a business detective story... that doesn’t short change the intense complexity of the scientific material for the background drama. »»»

For people with a proper education, Randell Mills’ book of 1754 pages (Febr. 2022 – downloadable at brilliantlightpower.com), called “The Grand Unified Theory of Classical Physics” (GUTCP), is perhaps better reading. It refers to his more than hundred publications in respectable scientific magazines. The book’s introduction both provides an overview of the GUTCP and illustrates how this theory is more accurate in its predictions than quantum mechanics, despite wonderfully simple mathematics.

The Introduction of the GUTCP starts off with discussions of the shortcomings in the theory of Quantum Mechanics, developed by Schrödinger and Born – the failure to predict the fourth quantum number called spin, the failure to predict energy levels below the ground state in Hydrogen, and the failure to accurately describe multi-electron atoms, to name a few. Thus a better theory was called for. Mills’ GUTCP is based on Classical Physics and accurately describes 85 orders of magnitude of phenomena from galaxies down to the microworld of the atom. It is far more successful than Quantum Mechanics at describing a wide range of phenomena. The Introduction discusses the many predictions of GUTCP, which afterwards have been experimentally verified. One of the best sections in the Introduction is the table of the predictions and shortcomings of Quantum Mechanics compared to those of Mills’ theory (Box I.1). There is also a well-written and insightful list of physical concepts that arise from the application of Classical Physics (pp. 43-45).

To name a few accomplishments: GUTCP predicted the acceleration of the expansion of the Universe, now observed since 2000. GUTCP predicted the existence of Hydrinos – downsized Hydrogen configurations that are non-radiative but in its genesis release tremendous amounts of energy to certain well defined catalysts. The Hydrino genesis releases on average 200x the energy in form of light, compared to the combustion of Hydrogen. This discovery has given rise to a new energy source, nearing its commercial introduction after more than a quarter of a century of research. It has also given rise to exciting new Hydrino materials. GUTCP may have discovered the secret to the overwhelming amount of Black Matter in the universe that could be made up of Hydrinos. An amazing feat of GUTCP over Quantum Mechanics is that it can accurately describe the correct energy levels of multi-electron atoms, up through calcium (20 electrons)! This was never achieved by Quantum Mechanics, except by resorting to very crude approximation methods combined with excessively complicated mathematics.

6 – The horrors of a one-sided approach that eschews our divine calling

The spirit of geometrical thinking reached its apex in the figure of Peter Singer, who has been Professor of Ethics at the prestigious Princeton University in the United States since 1999. His acclaimed philosophy follows three principles: Atheism, Darwinism and utility. These lead him to the one incontrovertible conclusion: that the human race cannot claim a privileged position relative to animals. His system is geared to increase the cumulative happiness of both animals and humans and at the same time to decrease their cumulative suffering. In his system, the aggregate 'quality of life' of animals and humans is the ambitious goal. Eating animals infringes animal rights and is wrong, for it would not promote the greatest good for the greatest number of species. He strongly condemns species-ism: to assert the divine calling of the human species and its unique place in the plan of creation he regards as contemptible species-ism. His utilitarian principle holds that pain is the only real evil and pleasure the only real good, though he admits that some pain may serve for the attainment of good, like going to the dentist. Pain is to be avoided, if necessary by terminating life. Singer's ideas are absurd, but within his self-contained system of ideas they are totally logical and acceptable.

7 – Faith versus rationalism

Thomas Aquinas spoke a great deal about the relationship between reason, belief and revelation as a complete system for arriving at the truth. He underlined the agreement existing between the light of reason and the light of belief. In fact, both have their source in God and thus cannot contradict one another. The careful study and explanation of the things of the world – the actual object of science – can be useful in order better to understand the divine revelation. He saw no conflict in this. Belief is not afraid of reason: belief rather seeks understanding and trusts reason. Thomas was certainly not against scientific progress – the result of human reasoning. The Church, particularly through its great thinkers, has always striven to see belief and science as a single whole, but alas has not found a willing ear in our society that no longer recognizes the spiritual and has finally devoted itself to exclusive Cartesian thinking and its counterpart of quantum mechanical thinking.

The super-rationalist way of thinking took deep root in Western thinking. The unlimited application of the Cartesian and post-Cartesian thinking would probably not have occurred if an extreme rationalistic attitude had not previously taken hold in defiance of the premises of faith. It was a cross-fertilisation from the houses of religion and politics that paved the way. Politics took religion in tow, greedy for the Church's possessions. Proud Luther allowed himself to be taken in by the rulers. That is how I see the facts – which, as far as this is concerned, have not been sufficiently well studied. It seems unimaginable to me that the rulers would have supported Luther – at first a rather insignificant figure – exclusively on the basis of theological arguments. The wars of religion, following in the wake of the Reformation, tell a different tale.

And thus Luther became the hero of rationalism, an important man who was listened to, a rationalism that was diametrically opposed to the true belief – but he saw things differently. Though Scripture was 'supra rationem', according to Luther, nothing should be accepted 'contra rationem'. To Luther, if faith was incon-

sistent with reason, faith had to bend.⁽¹²⁸⁾ This means that what cannot be seen and cannot be understood cannot be accepted.

Thomas Aquinas says it differently: if an article of faith escapes understanding, it will be understood in some future time. This has become the common view within the Roman Catholic Church, without which theology is doomed to become a vain enterprise. This we read in the volume entitled “Katholieke Dogmatiek” by the Dominicans A.H. Maltha and R.W. Thuys: (Maaseik # 1951, pp. 191-92)

«« The Fifth Lateran Council (1512-17) teaches that any statement contradicting a truth of the faith is completely false (Denzinger 738); Vatican I (1869-1870) expressly confirms that there can be no contradiction between faith and reason. Since both the truth of faith and the natural truth in the end rely on God’s understanding, it is impossible for there to be contradiction between what is believed and what is observed. Hence every difficulty encountered by reason must be solved by demonstrating that it is conclusive in the area of this or any other supernatural reality. »»»

How to arrive at the whole, based on its parts

Of particular interest is an individual’s (limited) capacity to comprehend complex relationships. In most cases, in order to grasp the meaning of complex relationships, or the whole, one must be able to consider simultaneously the parts of the whole and their interrelationships – one must keep in mind, either simultaneously or in close temporal proximity, the parts and their interrelationships. This particular cognitive act should not be confused with the manner in which information is presented. The two are largely independent. Pieces of information need not be ‘presented’ in close temporal proximity and different pieces can even be presented years apart. But to ‘comprehend’ complex interrelationships, or the whole, at some point one must simultaneously hold these pieces in mind. Limits in the ability to do so set a ceiling on the complexity of problems that can be grasped.

From: “The Limits of Scientific Reasoning” by David Faust
University of Minnesota Press, USA # 1984 (p. 107)

The cardinal point is around the question: can and may science subject the contents of revealed mysteries of belief to a truth test? No! Science concerns itself with the natural, belief with the supernatural. These are on different levels. Belief would never study the phenomenon that under normal circumstances water is liquid but at certain low temperatures hardens into ice and at certain high temperatures evaporates. And science has nothing to say about typical affairs of belief, such as for instance: how can it be that there is one God in three separate Persons? How did the Word of God become man? How could Mary become the mother of the God-Man Jesus Christ and yet remain a virgin? How could the God-Man Jesus Christ rise again after His death? These are all questions that belong to the supernatural field of belief and no scientific study of this is possible. ‘Single’ occurrences, such as the conception (incarnation) of Christ, His rising after His death and suchlike cannot be proven according to the scientific methods that physical study maintains. If these questions are asked: Did Jesus really rise from the dead? Was his grave really empty? Did his disciples really see Him again alive and

well?... then it means that the revealed ‘fact’ of Christ’s resurrection is no longer fully accepted as a mystery of faith but that doubt and disbelief are spread.

And yet God does not offer articles of faith without compensation to reason. God always presents an article of faith to humankind with manifestations to attest to its veracity. Thus after His resurrection Jesus appeared to a large number of people. He was also willing to convince Thomas because his lack of belief was not unreasonable when seen in the light of recent events. But ‘now’ our disbelief in His resurrection would be unreasonable. The Holy Eucharist is an important point of faith in the ‘not yet fully understood’ category. There are many occurrences that witness to the truth of the Holy Eucharist, an anthology of which can be read in “Geloof in Mij” (Believe in Me) by André Lemmens (1990), originally published by the diocese of Roermond; the book cites 21 miracles, confirmed by the Church, demonstrating the Eucharistic miracle. There is also a French publication by J-M Mathiot with more than 150, but even that is incomplete. (See also YouTube: **“Eucharistic Miracle, Buenos Aires”**)

The public media present the difference between religion and science as an unbridgeable gap, while it is no more than question of level. Actually they are each a prolongation of the other; they are congruent. To give an example: Investigations into physics recognise all kinds of phenomena that are not fully understood and are more or less articles of faith. In this line of thought it is generally accepted that gravity is not properly understood. Yet it is the most important large-scale interaction in the universe. One of the consequences of this lack of understanding is that no objective method exists to establish the weight of a kilogram. As of now, the prototype kilogram is kept at the “Bureau International des Poids et Mesures” (BIPM) in Sèvres, near Paris. This means that the prototype always has a mass of 1 kg, even when it gets ‘heavier’ as a result of the accretion of dirt from the atmosphere, or ‘lighter’ as a result of cleaning. Gravitation can easily be experienced, but gravitation itself cannot be seen. Mass (an object) can be seen, but gravitation can only be observed through its effect called weight. In this way the gravitational concept resembles an article of faith.

8 – The devil’s apple

Luther’s Old Testament God was a God of power, his New Testament God one of Love, but the God of the theologians, of which Luther was a specimen, was one whose appeal is first and foremost intellectual; His existence seems to be there to help man to understand the universe. One of the effects of the Reformation was to give an impulse to scientific inquiry based on the unshakeable belief that reason could unlock the mysteries of life. There is some truth in the saying that modern science is the heritage of the Reformation, itself being an offshoot of Humanism, but it is completely wrong to say that without it the rise of science would not have happened. It would indeed have been preferable if the alternative course had been followed, for that would have occasioned a two-pronged approach in which not only the rights of man but also of God would have been given prominence.

In those early days of scientific enquiry, of the 16th and 17th centuries, the Roman Catholic Church exerted a stifling influence on the development of science, as has been demonstrated by the vindication of Galileo Galilei (†1642), who was obliged to retract the statement (as a fact, but not as a hypothesis) that the earth revolves

around the sun. The Catholic Church was too occupied with its own reform and with halting the assaults from Protestantism to be lenient towards unsubstantiated ideas in science. (It is only much later that Galileo's view was proven to be true.) In actual fact, most innovative ideas in the 16th and 17th century came from Protestantism, though some notable exceptions can be pointed out in figures like Pierre Gassendi (†1655), who was a Catholic priest and a close contemporary of Descartes (he played a crucial role in the revival of the theory that the world is made of small, indivisible particles and he rejected the Aristotelianism so characteristic of the period). The abuses Luther denounced were very clear and would have been rectified anyhow. The essential point of contention was something different and Rome understood. The issue at stake concerned the authority of the individual and his ratio against the divine authority of the pope.⁽¹²⁹⁾ The notorious champion of the Roman cause, Louis Veuillot (1813-1883), that famous publisher of the French magazine "L'Univers", summed it up like this: (Mélanges II-2/185)

«« Proclaiming the right to free inquiry, submitting the reason of God to the sovereignty of Man, giving to each individual the faculty or rather imposing on him the obligation to create for himself his own religion within the Biblical precinct, Luther wanted to deny the presence on earth of the divine authority [through the institution of Christ's Church on earth], by which he straight away opened the door to purely human religious [institutions]. Because Reason appropriated the part that belongs to God in the moral direction of humankind, it had to remain the only master of our beliefs [and mystical inclinations], teachings, the laws and our morals. »»

Transposed to the other houses and blended with the Machiavelli's philosophy (†1527) and the like, the Reformation produced a terrible potion. The Renaissance was an age with a tremendous urge for freedom, for the self-determination of man – an age, therefore, of the fomenting of many new ideas and attitudes. It is not necessarily demarcated by the second half of the 15th century and the first half of the 16th if we like to define it as Humanism, and we all know that the exaltation of the individual was the point of departure of Humanism. Its model was sought in the idealised antiquity of the Greeks and Romans, still badly understood, thus farther back than our Christian roots. Characteristic - how could it be otherwise? - was that hostility to the hierarchy, which displayed itself in contempt for the holy institution of the Church and its priests. The strongest evidence of this is to be found in Machiavelli's Discourses and in his burlesque play The Mandragora, which portrayed the priest in the attire of the hypocrite. This brought him instant fame. Mandragora is a word derived from the Old High German 'runa', meaning secret. The mandragora plant or mandrake sometimes is in the form of a human figure, for which reason in the past it had magical or satanic powers ascribed to it; and for that reason too it was sometimes known as the devil's apple. The message is clear. It was thought rather amusing, also by the ecclesiastical authorities, who did not perceive it as an attack. In his "Discourses", only published four years after his death, the following passage appears: *"The nearer people are to the Church of Rome, which is the head of our religion, the less religious are they (...) Her ruin and chastisement is near at hand (...) We Italians owe to the Church of Rome and to her priests our having become irreligious and bad."*

9 – *The means serve the end*

In 1513 Machiavelli writes his best-known book: “Il Principe” (The Prince/Ruler), in which he lays down his observations of the criminal political process, without expressing his disapproval and giving the impression that this is the way it always happens. Machiavelli’s description of the politics of the princes is nothing more than the application of the utility of a deed (here we recognise Singer): the rabid application of ‘the means serve the ends’ regardless of the ethical value of the means being applied or whether the ends are considered laudable. The names of the game are pragmatism, opportunism, ruthlessness, unscrupulousness and deceit.

Machiavelli was continuing a centuries-old discussion on the place of the church in the business of government. The next step was the advocacy of the complete separation of church and state. It seems that the earliest known proponent of this scheme is to be found in Faustus Socinus (1539-1604). He was consumed by hatred for the Reign of Christ on earth, its institutions and teachings, which is reflected in his statement that it is unlawful for a Christian to hold a magisterial office (teaching function). He was nineteen when the suspicion of Lutheranism fell on him, which carried a jail sentence at the time. At age twenty-three, in his *Explicatio* of the proem to John’s Gospel, he attributes to Our Lord an official, not an essential, deity. In a letter written the following year he rejects the natural immortality of man (which means that man has no immortal soul).

During his entire life, he trusted his own conclusions and pursued the aim of reducing the fundamentals of Christianity, trying to push them beyond the fringes of real life. Not without reason does the memorial tablet at Siena, inscribed in 1879, characterise him as vindicator of human reason against the supernatural. The inscription on his grave once read “*Tota jacet Babylon destruxit tecta Lutherus, muros Calvinus, sed fundamenta Socinus*”, or: Luther tore down the entire roof of Babylon (the Roman Catholic Church), Calvin demolished its walls, but Socinus robbed it of its foundations.

Thus we see how a rationalism pushed beyond its limits eventually causes the children to turn against their ‘Father’. God is the ultimate rationalist, let there be no mistake about that. Rationalism is not of itself wrong, but a rationalism that has been uprooted, is separated from God, tends towards Satanism. I Samuel 15:23 is perfectly clear on the subject: “*For rebellion is as the sin of witchcraft, and stubbornness is as iniquity and idolatry.*” This is a hard judgement on our modern science, on what science has become, since there is also a good type of science. If you cannot agree with verdict, take a look at the fruits of science, for it is ‘by their fruits that you shall know them’.

10 – *Conclusion*

On July the first 2009 it happened that Pope Benedict XVI gave the pallium to 23 archbishops in Rome, and for the occasion discussed the First Letter of Peter, saying:

«« Faith comes from the Eternal Reason, which came into our world and showed us the true God. It goes beyond the capacity of our own reason, just as love sees more than simple intelligence. But faith speaks to reason and in the dialect of discussion can hold it’s own with reason. It does not contradict

it, but goes along with it, and at the same time, leads beyond it - introducing us to the greater Reason of God. »»»

This seems a suitable ending for this article.

Notes

(122) "The Meaning of Evolution" by George Gaylord Simpson - Bantam Books, New York # revised edition 1971 (pp. 314-15).

Postmodernism against Cartesianism

(123) Postmodernism is a semi-scientific movement that developed in the 20th century, and rejects an approach to knowledge that searches for absolute truths and universal descriptions. Postmodernist thought is an intentional departure from the approaches that had previously been dominant. Particularly in the Humanities, it can be understood as a reaction to Cartesianism. The term postmodernism comes from its critique of the scientific mentality with its unshaken belief in objectivity and progress. Postmodernism resembles the Neomarxist movement that issued from the Frankfurter Schule, and it has strong political undertones; it hallows a subjective and relativistic attitude and attacks the use of sharp classifications, also in matters of religion and morality

A solution to the paradox of idea and geometry

(124) Although the real solution to the paradox of idea and geometry, as defined by Plato, appeared simple, we had to wait 2300 years for that until the publication of the scientific article "Vague Sets" by Max Black in 1937. Only after the publication of "Fuzzy Sets" in 1965 by Lofti Zadeh did the new thinking take hold, which has many applications in process technology. Bart Kosko defines fuzziness as follows, summarised from his book "Fuzzy Thinking": «« Fuzziness is that 'A' and 'not-A' are both valid at the same time. (Indeed, the irrationals are both odd and even at the same time.) The fuzzy principle states that everything is a matter of degree. It sets multi-valence against bivalence (Jan Lukasiewicz) and open-end not-exhaustiveness against closed-end exhaustiveness. It is essentially analogue instead of binary. To a certain degree each part retains the whole and so it accounts for our probability perception of reality. Probability theory, based on the fiction of 'A or not-A', fits within the fuzzy principle. The view that God throws dice is 'probably' not true. »»

(125) Quote taken from the Dutch edition: "Encyclopedisch Woordenboek der Klassieke Oudheid" – ICOB # 1976, a revision by J.W. Fuchs of the German edition: "Wörterbuch der Antike" by H. Lamer - Alfred Kröner Verlag, Stuttgart.

(126) "The Republic" (Book VII), based on the English translation by Thomas Taylor. See also "Timaeus" (33B-34B).

The true groundstate related to the speed of light

(127) a. Randell Mills calculated the true ground state of the atom, an orbit with a radius of 1/137 of the Bohr radius, because then the speed of the electron equals almost the speed of light. (Mills 2015, Ch. 28) A lower radius (1/138) would mean for the electron a speed faster than the speed of light, which is impossible. This relates to the fine structure constant or Sommerfeld's constant of 0.007297 (or 1/137.035), denoted by the symbol alpha, that can be expressed as a combination of other constants and seems to pop-up everywhere. Something magical happens

at this radius: the electron's rest mass then becomes 511 keV (kilo-electronvolt), just like the magnetic field energy and the energy calculated by the Planck-Einstein equation (using a wavelength that corresponds to the circulating charge on the sphere), and finally, it equates the electron-positron annihilation emission as observed in our galaxy. It should be noted that the helium atom has an electron orbit at half the orbit of the hydrogen atom, reason why the hydrogen bomb releases so much energy, when it fuses two hydrogen atoms into helium, a process that continuously occurs in our sun. The sun is actually a helium factory.

On the conservation of angular momentum

(127) b. Electrons jump from quantum moment to quantum moment within a torus, creating an ultra-fine tissue, an energy shell, which, according to an equation by the famous physicist Hermann Haus from the Massachusetts Institute of Technology, is radiation neutral on the basis of "*the conservation of angular momentum*", i.e. without energy loss. This has been further elaborated by Professor Ph. M. Kanarev in "Model of the Electron" (Apeiron Physics Journal Vol. 7 Nr. 3-4, July-Oct 2000). In it he states (p. 192): "[The geometrical movement of the rotating] electron has the form of the rotating hollow torus. Its structure proves to be stable due to the availability of two rotations [that are perpendicular to each other]."

(128) With regard to the relationship between reason and faith, Luther also stated different things. It would not be the first time that he contradicted himself. It is all a matter of what typically characterises the reformers' thought afterwards.

Rational Thinking should be Subservient to Faith

(129) Deuteronomy 17:11 reads: "*You must abide by the law as stated according to the promulgated decree. Do not deviate from the promulgated decree, even if they say that right is left.*" "*Even if they tell you that right is left and left is right*", the great Jewish scholar Rashi (1040-1105) told. From here we learn that the Israelite people had to obey the decisions of the priests and Levites even if their words made no sense. The meaning of this for our time is that rational thinking should be subservient to faith and not the other way around. This refers to scientific thinking in which reality, a spiritual thing, is considered unknowable.

If there is disagreement about the interpretation of the precepts? What then? How can we obey the Torah (the Biblical Law) in everything if we cannot rely on a Supreme Court whose interpretation we can rely on? The portion prior to the above verse sheds light on this question: "*If there arises a matter too difficult for you to judge, and you shall rise and ascend to the place that the Lord your God has chosen and you shall come to the priests and the Levites and the judge in those days and inquire of them; they shall pronounce upon you the sentence of judgement. You shall do according to the sentence that they will tell you from that place which the Lord chooses. And you shall be careful to do all that they instruct.*"



‘Arthur Waite Bibliography’

This is a list of the publications of ‘the great’ Arthur Edward Waite, showing the way of thinking and the tendencies within Masonic circles, who have remained faithful to the creed of their founding fathers, the Socinians, alias the Rosicrucians. Taken from a 2004 list brought out by Kessinger Publishing, Montana, USA, a company that sells those books.

Arthur Waite (1857-1942) was an occultist and co-creator of the Rider-Waite Tarot deck. Born in the United States, and raised in England, Waite joined the Hermetic Order of the Golden Dawn at the age of 33 and also entered the Societas Rosicruciana in Anglia eleven years later. The Golden Dawn was torn by internal feuding until Waite’s departure in 1914. The following year he formed the Fellowship of the Rosy Cross, not to be confused with the Rosicrucians.

New Encyclopedia of Freemasonry (1921): A two volume set. Encyclopedia of Freemasonry (ars magna latomorum) and of cognate instituted mysteries: their rites, literature and history. With sixteen full-page plates and other illustrations. With technology of rites and grades and table of cross references. 1016 pages.

Alchemical Writings of Edward Kelly: Two treatises on the Philosophers’ Stone together with the Theatre of Terrestrial Astronomy; Index: Biographical Preface; The Stone of the Philosophers; Certain Fragments selected from the Letters of Edward Kelly; The Humid Way, or a Discourse upon the Vegetable Menstruum of Saturn; The Theatre of Terrestrial Astronomy. 214 pages.

Alchemists through the Ages: Lives of the Famous Alchemistic Philosophers from the year 850 to the close of the 18th century, together with a Study of the Principles and Practice of Alchemy, including a Bibliography of Alchemical and Hermetic Philosophy. Illustrated by a series of rare and unusual Portraits. This compact, well-researched book describes the theory and practice of Alchemy by letting the famous alchemists (over 50 of them) speak for themselves. Essays on the True Principles and Nature of the Magnum Opus, and on its Relation to Spiritual Chemistry and The Physical Theory and Practice of the Magnum Opus. Includes an Appendix, Index, and an Alphabetical Catalog of Works on Hermetic Philosophy and Alchemy. The real quest of the alchemists was self-transformation, the unfolding of their own higher-self, and in the process they created the modern Scientific Method. 316 pages.

Azoth or the Star in the East: Embracing the First Matter of the Magnum Opus, the Evolution of Aphrodite-Urania, the Supernatural Generation of the Son of the Sun, and the Alchemical Transfiguration of Humanity. This was an earlier book of Waite, written when he was young and immersed in the study of alchemy. Index: The Sublimating Principle of Alchemy; Symbolism of Israel and Lucasta; The Agnostic Standpoint; Mysticism; Mysticism a Practical Science; Transcendental Science and Religion; Mystical Philosophy of Nature; Evolution and Mysticism; The Outward Man; Hermetic Doctrine and Development; Perfection of Humanity; Steps in the Way of Attainment; Religion of Evolution; Grounds of Spiritual Practice; The Holy Assembly; Catholic Doctrine of Theosophy and Mysticism; Five Nuptials of Ideal Being; The New Birth; The First Sublimation; Interior Sublimation; The Obscure Night; Evolution of the Interior Life. 246 pages.

Belle and the Dragon (1894): Waite takes the reader on a mystical journey through fairyland. We learn about Ravendale and the ravens found within. We travel to fairyland, meet Baphomet the great mystic and find ourselves in a haunted church. We meet up with a dragon and stay to see the queen chosen. 196 pages.

Book of Black Magic and Ceremonial Magic: The Secret Tradition in Goetia, including the rites and mysteries of Goetic theurgy, sorcery and infernal necromancy. Completely illustrated with the original magical figures. Partial Index: Antiquity of Magical Rituals; Rituals of Transcendental Magic; Composite Rituals; Key of Solomon; Lesser Key of Solomon; Rituals of Black Magic; Complete Grimoire; Preparation of the Operator; Initial Rites and Ceremonies; Descending Hierarchy; Mysteries of Goetic Theurgy; Mystery of the Sanctum Regnum; Method of Honorius. 374 pages.

Book of Destiny: Partial Index: Great Oracle of the Gods: called also The Book of the Speech of Hermes-Mercurius and the True Wheel of Fortune; Art of Knowing the Good Genii and Their Influence Upon the Destiny of Men; Occult Science of Jewels; Sidelights on Workings of Destiny in Business and Pleasure; Some Names of Womanhood; Curiosities of Planetary Lore; Wheel of Wisdom; Little Book of Divination by Flowers; Mystery of Dreams. 292 pages

Book of Mystery and Vision (1902): Partial Index: Salvete; Of Single Chords and of Monologues; Of the Morality of the Lost Word; Of Things Heard and Seen; Of World's Not Realized; Valete. 258 pages.

Book of the Holy Graal (1921): Index: quest of a perfect sleep; dream nomads; daughter of life; way in the waking world; tale of eternal death; house of many mansions; dream in the quest of God; garden of life; master comes; way of the waterside; food of heaven; man and maid; of spiritual marriage; priest and priestess; golden veil of doctrine; Christ mystical; within the veil; Valete. 174 pages.

Brotherhood of the Rosy Cross: Waite at his scholarly best, gives an account of the Rosicrucians from beginning to the present. Index: Mythical Rosicrucian Precursors; Militia Crucifera Evangelica; Alchemists and Mystics; Symbolism of the Rose and Cross; Fama Fraternitatis; Confessio Fraternitatis; Chemical Nuptials; Authorship of the Chemical Nuptials; Development of Rosicrucian Literature; English Rosicrucianism; A Great German Alchemist (Michael Maier); Later Continental History; Awakening in England; German Rosicrucianism in the Eighteenth Century; Ritual and Masonic Period; Rosy and Golden Cross; Saint-Germain and Cagliostro; Fratres Lucis; Rosy Cross in Russia; English Rosicrucianism of the Nineteenth Century; A Modern Rosicrucian Order; A Kabalistic Order of the Rose-Croix; American Rosy Cross; Last Developments of the Mystery. 650 pages.

Collected Poems of Arthur Edward Waite: Vol. 1 and 2 (1914). Arthur Edward Waite is known for his writings on such varied subjects as alchemy, Freemasonry, the Holy Grail, cartomancy, magic, the tarot and various occult sciences. This book contains a collection of his poetical works on the strange houses of sleep, mystery and vision, quest of the golden gate, garden of spiritual flowers, morality of the lost world, and the further side of the portal. 766 pages.

Doctrine and Literature of the Kabbalah: From whatever point of view, the Kabbalah is of importance: it connects with literature greater than itself and with pregnant issues of history. It is part of the history of philosophy, and as such it once entered into the thought of Europe. It is responsible, broadly speaking, for all that strange tissue of symbolism and ceremonial which made up the magic of the Middle Ages; at a later period it sought to transform alchemy; it tinc-

tured many of those conventional practices and beliefs which we term superstition generically, and the guise in which we know them is therefore chiefly a Kabalistic guise.” Index: Post-Christian Literature of the Jews; Doctrinal Content of the Kabalah; Source and Authority of the Kabalah; Written Word of Kabalism First, Second and Third Period; Some Christian Students of the Kabalah, Raymond Lully, Cornelius Agrippa, Paracelsus, William Postel, The Rosicrucians, Robert Fludd, Thomas Vaughan, Ralph Cudworth, Saint-Martin, Eliphas Levi, Papus; Kabalah and Other Channels of Esoteric Tradition, The Kabalah and Magic, Alchemy, Astrology, Freemasonry, Tarot and Mysticism. 528 pages.

Emblematic Freemasonry: It is the design of the following studies to present in an ordered sequence the chief aspects which have been assumed by Emblematic Freemasonry and its connection and developments in the course of their progress through the past two centuries. Chapters include: Intimations from the old records; The acception and Robert Fludd; Ancient York Masonry; The Mystical Quest in Freemasonry; Masonic Tradition and the Royal Arch; The second birth of Masonry in the continental rites; Grades of the secret tradition; Christology of the secret tradition; The chivalry of the holy temple; The development of vengeance grades; The alleged masonic peril; The place of Masonry in the rites of initiation; Appendix. 146 pages

Hermetic and Alchemical Writings of Paracelsus (Vol. 1 to V): Edited with a biographical preface, elucidatory notes, a copious Hermetic vocabulary, and Index, by Arthur Edward Waite. Originally published as two volumes, now combined into one volume for easy reading and affordability. The work, as it stands, consists of (a) the large body of literature, entire and unabridged, attributed to Paracelsus, and treating directly of alchemy, and the transcendental doctrines and physics of the Magnum Opus; (b) The whole Paracelsian literature of the Great Elixir and the Universal Medicine; (c) So much of the Hermetic philosophy and cosmogony of Paracelsus as has been judged necessary to illustrate his alchemical teachings; (d) One important treatise illustrating the application by Paracelsus of metallic and mineral substances to the treatment of diseases; I An exhaustive collection of alchemical references scattered through the chirurgical works of Paracelsus. Index: Coelum Philosophorum; Book Concerning the Tincture of the Philosophers; Gradations of Metals; Treasure of Treasures for Alchemists; Concerning the Transmutations of Metals and of Cements; Aurora of the Philosophers; Concerning the Spirits of the Planets; Economy of Minerals; Composition of Metals; Concerning the Nature of: Generation of Natural Things; Growth of Natural Things; Preservation of Natural Things; Life of Natural Things; Death of Natural Things; Resuscitation of Natural Things; Transmutation of Natural Objects; Separation of Natural Things. Paracelsic Method of Extracting Mercury from all the Metals; Sulphur of the Metals; Crocus of the Metals, or the Tincture; Philosophy of Theophrastus Concerning the Generations of the Elements of: Air; Fire; Earth; Water, with its Fruits. Book about Minerals; Concerning Salt and Substances Comprehended Under Salt; Concerning Sulphur; The Mercuries of the Metals; De Transmutationibus Metallorum; The Vatican Manuscript of Paracelsus; Manual of Paracelsus. 814 pages.

Hermetic Museum Restored: An enlarged edition containing twenty-two most celebrated chemical tracts. Index: The Golden Tract; Golden Age Restored; Sophic Hydrolith; A Demonstration of Nature; A Short Tract; Only True Way; Glory of the World; A Tract of Great Price; A Very Brief Tract; Book of Lambspring; Golden Tripod; Chemical Treatise of Thomas Norton; Testament of Cremer; New Chemical Light; New Chemical Light, Second Part; An Open Entrance to the Closed Palace of the King; A Subtle Allegory Concerning the Secrets of Alchemy; Three Treatises of Philalethes I; Three Treatises of Philalethes II; Three Treatises of Philalethes III; John Frederick Helvetius' Golden Calf; All-Wise Doorkeeper. 680 pages.

Hidden Church of the Holy Graal (1909): It's Legends and Symbolism. Considered in their Affinity with Certain Mysteries of Initiation and other Traces of a Secret Tradition in Christian Times. Index: Roots of the House of Meaning; Mysteries of the Holy Graal in Manifestation and Removal; Early Epochs of the Quest; Lesser Chronicles of the Holy Graal; Grater Chronicles of the Holy Graal; German Cycle of the Holy Graal; Holy Graal in the Light of the Celtic Church; Mystic Aspects of the Graal Legend; secret Tradition in Christian Times; Secret Church; Bibliography of the Holy Graal. 736 pages.

Holy Grail: The Galahad Quest in the Arthurian Literature: The Holy Grail is central to the Arthurian literature. The lighthearted journeys for women and adventure build up to the journeys of the soul. It becomes clear that these earlier journeys were also not really what they seemed to be, not really journeys on horseback and clothed in armor, but journeys of the spirit. Index: The Holy Vessel and its Literature; Holy Grail in its Manifestation and Removal; The Conte Del Graal; Cycle of Robert De Borron; Vulgate Cycle of the Holy Grail; Other and Later Texts of the Grail Legend; German Cycle of the holy Grail; Welsh and English Texts; Critical Aparatus in Respect of the Grail Cycles: Celtic Hypothesis; Further Critical Apparatus: The Schools, the Churches, and the Sects; Further Critical Apparatus: The Ritual Hypothesis; Secret of the Holy Grail; Bibliography of the Holy Grail. 612 pages.

Holy Kabbalah: Post-Christian literature of the Jews; source and authority of the Kabbalah and the age of the chief texts; written word of Kabbalism, first period; written word of Kabbalism, second period; doctrinal content of the Kabbalah in respect of God and the universe; hierarchies of spiritual being; ways of God with man; higher secret doctrine; written word of Kabbalism, third period; some Christian students of the Kabbalah; the Kabbalah and other channels of secret tradition; final considerations. 664 pages.

Lamps of Western Mysticism: Essays on the Life of the Soul in God. A collection of thirty-two Essays in Three Parts. Lamps of Quest: The Path of Reality: An Ex-parte Statement; Oblation and Service; Consecrations of Life and Thought; The Higher Understanding; The Sense of the Infinite; Life and Doctrine; A Study in Contrast; The Higher Aspect; Spiritism and the Mystic Quest; Official Churches and Spiritism; The Path of the Mysteries. Lamps of Life: Of Crowned Masters; The Dionysian Heritage; The Everlasting Gospel; The Message of Eckehart; Ruysbroeck's Journey in the Divine Distance; A bride of Christ; Voices from Carmel; Post-Reformation Mystics; Molinos and the Quietists; Later Witnesses to the Life of Life; In the Shadow of Revolution; A Modern Daughter of Desire;. Lamps on Heights: Mystical Realization; Faith and Vision; The Path of Contemplation; The World to Come and the World of the Holy One; Grounds of Unity in Grace and Nature; The Poet's Glass of Vision; A Study in Christian Pantheism; The Grades of Love; The Inward Holy of Holies. 338 pages.

Magical Writings of Thomas Vaughan (Eugenius Philalethes): A Verbatim Reprint of His First Four treatises; Anthroposophia Theomagica; Anima Magica Abscondita; Magia Adamica; and the True Coelum Terrae. The Magical Writings of Thomas Vaughan constitute an explanatory prolegomena not only to the general history of practical transcendentalism, and to the philosophy of transcendental art, from the standpoint of a Christian initiate, but they are special directed to the interpretation of alchemical symbolism; they claim to provide the intelligent reader with a substantially fresh revelation of that mysterious First Matter of the Magnum Opus. Thomas Vaughan enlarges the theoretical scope of alchemical processes, and delineates the spiritual evolution of humanity. 194 pages.

Manual of Cartomancy and Occult Divination: Lesser Secret Sciences and the Tradition Therein; Oracle of Human Destiny; Mystic Alphabet of the Magi; Golden Wheel of Fortune; Art

of Invoking Spirits in the Crystal; Egyptian Method of Fortune-Telling; English Method of Fortune-Telling by Cards; Universal Oracle; Book of the Secret Word How to Find Lucky Numbers with Dice; To Read a Person's Character by Means of Kabbalistic Calculations; Mathematical Fortune-Teller; Judgments Drawn from the Moon's Age; Virtues and Influences of Precious Stones; Unheard of Curiosities; Hours, Virtues and Colors of the Planets; Art of Ruling by the Law of Grace; Fatality of Days and Places; Arts of Divination; Divination by Dreams. 264 pages.

Mysteries of Magic: A Digest of the Writings of Eliphas Levi, Life of Alphonse Louis Constant; Notes on the Mysteries of Magic as expounded in the Occult Philosophy of Eliphas Levi; Threshold of Magical Science; Doctrines of Occult Force; Written Tradition of Magic; Doctrine of Spiritual Essences or Kabbalistic Pneumatics; Ceremonial Magic; Science of the Prophets; Science of Hermes; Key of Magical Phenomena; Key of Modern Phenomena; Religion of Magic; Great Practical Secrets; Thaumaturgical experiences of Eliphas Levi; Embodying the Spirit of the Author's Philosophy; Three Credos of Eliphas Levi: Creed of the Magus; Catholic and Magical Symbol; Philosophical Credo. 536 pages.

Occult Sciences: A Compendium of Transcendental Doctrine and Experiment, Embracing an Account of Magical Practices; or Secret Sciences in Connection with Magic; of the Professors of Magical Arts; and of Modern Spiritualism, Mesmerism and Theosophy. The subject of occultism has been very fully dealt with during recent years by various students of eminence. It has remained for the results of their studies to be condensed into a portable volume, which shall conduct the inquirer into the vestibule of each branch of the occult sciences, and place within his reach the proper means of prosecuting his researches further in any desired direction. Index: Magical Practices; White Magic: The Evocation of Angels; White Magic Evocation of Spirits; Black Magic; Necromancy; Secret Sciences in Connection with Magic; Alchemy; Elixir of Life; Crystallomancy; Composition of Talismans; Divination; Divining Rod; Astrology; Kabbalism; Professors of Magical Art; Mystics; Rosicrucians; Freemasons; Modern Phenomena; Mesmerism; Modern Spiritualism; Theosophy. 298 pages.

Pictorial Key to the Tarot (1910): This text is devoted to explain the profound meaning of the 22 cards of the major Arcana. Selected contents: the veil and its symbols; the doctrine behind the veil; the tarot and the secret tradition; the outer method of the oracles; distinction between the greater and lesser Arcana; the four suits of Tarot cards, including wands, cups, swords, and pentacles; the recurrence of cards in dealing, an ancient Celtic method of divination; the method of reading by means of thirty-five cards. Includes wonderful illustrations of Tarot cards. 344 pages.

Quest of the Golden Stairs. A mystery of kinghood in Faerie (1927): Index: court of stars; book of the voices of Faerie; magic ring; beloved kinsman; paradise of birds; opening of the eyes in Faerie; daughter of the stars; woodland chapel in Faerie; history of Prince Melnor and of Beryl, a queen of spells; day of passing in Faerie; day of betrothal in Faerie; mission from the evening star; obscure night of Faerie; hand and crown in Faerie; way of a crown in Faerie; priest of stars; beginning of travels in Faerie; quest of a soul in Faerie; dream tower; bells of Faerie; festival of kinghood; enthronement. 182 pages.

Raymund Lully: Illuminated Doctor, Alchemist and Christian Mystic: There are few names in mediaeval literature and in the history of its philosophical thought, around which has gathered a more curious woof of legend confused with fact than the name of Raymund Lully. Index: A Problem of Personality; The Illuminated Doctor of Majorca; The Universal Science; The Hermetic Doctor; An Historical Research; The Science of Alchemy; The Mystical Doctor. 112 pages.

Real History of the Rosicrucians: Considered one of the best, most factual and complete historical records about Rosicrucianism. This book is scholarly, objective and non-partisan, and remains essential reading for those desiring a balanced and unprejudiced view. 454 pages.

Secret Doctrine in Israel a Study of the Zohar and its Connections: Index: Early Students of Kabbalism; Hidden Church of Israel; Majesty of God in Kabbalism; Doctrine of Cosmology; Myth of the Earthly Paradise; Serpent, Son of the Morning, and Fall of the Angels; Fall of Man; Legend of the Deluge; Covenant with Abraham; Of Moses, the Master of the Law; Temples in Jerusalem; Coming of Messiah; Soul in Kabbalism; Doctrine Concerning Sheol; Concerning Resurrection; Mystery of Shekinah; Mystery of Sex; Occult Sciences; Developments of Later Kabbalism; Alleged Christian Elements; Conclusion on Jewish Theosophy. 350 pages.

Secret Tradition in Alchemy: Contains its development and records; with intimations of the mystical experience which underlies Hermetic Symbolism. Chapters on Alchemy and supernatural life; Modern views on the Hermetic Mystery; Further speculations on philosophical gold; Ancient hermetic books and the way of the soul therein; Alchemy in China; The testimony of Byzantine alchemy; Arabian and Syriac Alchemy; The early Latin literature; The later chain of Hermes; The myth of Flamel; The chariot of Basil Valentine; Paracelsus; Denys Zacharie and others; Famous English philosophers; Alchemy and exploitation; The new light of alchemy; The reformation and German alchemy; Thomas Vaughan; The cosmopolite; John Frederick Helvetius; An alchemist of Mitylene; The Mystic side of Alchemy; Animal magnetism; and Kabbalistic alchemy. 438 pages.

Secret Tradition in Freemasonry (1911): A two volume set. The volumes appeared in 1911, and so far as my knowledge goes, they formed in respect of production the most beautiful work which has ever been issued in any land or language on the Masonic Subject. This is NOT an early edition of Waite's other work by the same name. Index: Volume 1, Fundamental Relations of the Craft and the High Grades; Development of the High Grades in Respect of the Ancient Alliance; Of the New Alliance of Freemasonry; The Masonic Orders of Chivalry; Of Alchemy in Masonry; Of Magical and Kabbalistic Degrees; Of the Mysteries on their Mystical Side, and of this Subject in its Relation to Masonry; Appendices; Index. 862 pages.

Secret Tradition in Freemasonry (1937): This was Waite's last book and according to the editor the most important book ever written on the esoteric aspects of Freemasonry. *"I am not offering in this book a revised edition of two volumes which appeared under the same title so far back as 1911. It is so altered, extended and transformed that it may claim to be a new undertaking and to supersede in fact that which it preserves in name."* Waite not only reedited and radically restructured the two volume edition, but he incorporated much of his Emblematic Freemasonry (1925) that it might, as he said, supersede the previous work. **This was Waite's last and (in his opinion) most important work on Freemasonry.** Index: Creative and Emblematic Freemasonry; Craft Degrees and Their Connections; Second Holy House; New Alliance in Freemasonry; Quest in Christian Ritual; Masonic Orders of Chivalry Apart from Templar Grades; Templar Grades of Freemasonry; Of Alchemy in Masonry; Of Magical and Kabbalistic Degrees; The Growth of Masonic Tradition; Freemasonry and the French Revolution; Mysteries on their Mystical Side. 722 pages.

Shadows of Life and Thought: A Retrospective Review in the Form of Memoirs. Index: The Holy Catholic Church; Paths in the Land of Faerie and Paths in Verse; Of By-ways, Purlieus and the Joys of These; Of Arms and the Knight in Chivalry; The Finding of a World in Verse; Footfalls on the Boundary of Another World; The Way of the Soul in Magic; Coming of Theodora; Hermetic Mysteries; Agia in Explored Doctrine and the Rosy Cross; Frater Avallaunius; Of

Marriages Made on Earth; A Hermetic Order of the Golden Dawn; A Corner in Alchemy; The Second Birth of a London Publisher; A Decade of City Life; The Craft of Masonry and the Rites Beyond; Strange Houses of Sleep; The Holy Grail and the Secret Tradition in Freemasonry; Great Symbols of the Tarot; Collected Poems; Psychical Research and the Mystic Path; A Second Epoch of the Golden Dawn; The Middle Way; The Vision and the Union; Theologia Exotica; Some Great Awakenings. 302 pages.

Some Deeper Aspects of Masonic Symbolism: Introduction by Joseph Fort Newton. Index: A System of Morality; The First Degree; The Meaning of Initiation; Entered, Passed, Raised; Imperfect Symbolism; The Third Degree; The Book of the Dead; The Christian Mysteries; The Mystical Fact; The Place of Darkness; Operative Masonry; The Old Charges; Living Stone; The Kabbalah; The Divine Name; The Temple; The Builder; Craft Masonry. 112 pages.

Songs and Poems of Fairyland (1888): An anthology of English fairy poetry. This work presents to the lovers of fantasy an anthology of the fairy poetry which during six centuries has made beautiful by its gracious melody the minor paths of English song. In the brief introduction Waite considers the Elfin mythology in its connection with poetry. 418 pages.

St. Martin: The French Mystic: Index: The Great Day of Saint-Martin; Early Life of the Mystic; The Search After Truth; A Doctrine of Correspondences; The Man of Desire; Later Life and Writings; Modern Martinism. 112 pages.

Strange Houses of Sleep (1906): Found in this volume are a variety of poetical verses and prose under the following heads: Shadows of Sacraments; Hidden Sacrament of the Holy Graal; Poor Brother's Mass Book; Book of the King's Dole and Chantry for Plain Song, A Greater Initiation. The original edition of this book was limited to 250 copies, our copy being No. 60, inscribed by the author. 340 pages.

Studies in Mysticism and Certain Aspects of the Secret Tradition (1906): Partial Contents: Life of the mystic; Enterprise of sanctity; Sense of the infinite; Supernatural goodness; Question of service; Asceticism and mysticism; Foundation of the higher magia; Lesser mysteries of the life of life; By-ways of half a century; Mesmerism and hypnotism; Savors of Louis XVII; Paradise of Hermes; Some offices of vain observance; Dwellers on the threshold; Who stand at the door and knock; A Masque of anarchy; Powers of the deep; Garden of Venus; Gate and the sanctuary; Voice of the beloved; Stewards of the mysteries; the Building Word; Rumors of the mystic quest; Veil of the Sanctum Sanctorum. 358 pages.

Three Famous Alchemists: Biographical sketches on Raymund Lully: A Problem of Personality; The Illuminated Doctor of Majorca; The Universal Science; The Hermetic Doctor; An Historical Research; The Science of Alchemy; The Mystical Doctor Cornelius Agrippa: The Agrippa of Legend; The Youthful Magician; The Occult Philosophy; Astrology and the Mystery of Numbers; Storm and Stress; Agrippa's Character; In the Depths; The Vanity of Arts and Sciences; Mysticism and the Reformation; Agrippa as Alchemist; Last Days; What Magic Owes to Agrippa and Theophrastus Paracelsus: Early Life and Travels; Wanderings and Death; As Above, So Below; Doctrine of Signatures; Necromancy; Origin of Diseases; Magic; Alchemy; Astrology; Comparison with Other Mystics; A Christian Occultist. 182 pages.

Three Famous Mystics: Biographical sketches on Saint-Martin, Jacob Boehme, Swedenborg. 190 pages.

Turba Philosophorum, Called also The Book of Truth in the Art and the Third Pythagorical Synod (reprint of a 1914 edition): The Turba Philosophorum is indisputably the most ancient extant treatise on Alchemy in the Latin tongue. This text is in English. 220 pages.

Unknown Philosopher: The Life of Louis Claude de St. Martin and the Substance of His Transcendental Doctrine: St. Martin (1743-1803) believed that the most important problem of all human thinking is to understand man as a free personality, whose very foundation is himself. Index: The Life of St. Martin; Sources of Martinistic Doctrines; The Nature and State of Man; The Doctrine of the Repairer; The Way of Integration; Minor Sources of St. Martin; The Mystical Philosophy of Numbers; Prayers of St. Martin; Bibliography; Martinism and the Masonic Rites of Swedenborg. St. Martin was the successor to Jacob Boehme an important mystic in the history light. 448 pages.

Unknown World (1894-1895): A magazine devoted to the occult sciences, magic, mystical philosophy, alchemy, hermetic archaeology, and the hidden problems of science, literature, speculation and history. Contains the issues of The Unknown World magazine from August 15, 1894 to June 15, 1895. 558 pages.

Way of Divine Union (1905): Being a Doctrine of Experience in the Life of Sanctity, Considered on the Faith of its Testimonies and Interpreted after a New Manner. The design of this study, which takes all Christian Mysticism as its province, is to restate the philosophy of life and mind from a mystical point of departure in the light of existing needs, and to indicate that the Way of Divine Life and Union is a way which can be followed and its end attained in this present age of the world. This volume may be regarded as the crown and summary of the author's life-long studies and personal experience in the paths of mysticism. Index: Title of the Quest; Concerning Ineffable Experience; Extent and Limits of Attainment in Christian Mysticism of the Latin Schools; Derivations and Reflections of the Mystical Term in Post-Reformation Schools; Concerning Union and identity; Analogies and Distinctions of Attainment in Records of Eastern Mysticism; Path in Christian Mysticism; Symbolism of the Christ-Life in the Soul; Symbolism of the Mystical Marriage; Of Soul and Spirit in Man; Mystical Experiment Considered in the Light of Consciousness; Reordination of Life and Mind; Mystical State in the World; Sacramentalism of our Inward Nature; Of Saving Grace in the Churches; Way of Attainment. 360 pages.

Works of Thomas Vaughan: Index: Anthroposophia Theomagica: A Discourse of the Nature of Man and His State After Death; Anima Magica Abscondita: A Discourse of the Universal Spirit of Nature; Magia Adamica: The Antiquity of Magic; Coelum Terrae: The Magician's Heavenly Chaos, Unfolding a Doctrine Concerning the Terrestrial Heaven; Lumen de Lumine: A New Magical Light; Aula Lucis: The House of Light; The Fraternity of the Rosy Cross; Euphrates: The Waters of the East; Appendices; Bibliography. 500 pages.

